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Outcomes of a participatory approach to interpretive planning in the Shark Bay World Heritage area, Western Australia

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OUTCOMES OF A PARTICIPATORY
APPROACH TO INTERPRETIVE
PLANNING IN THE SHARK BAY WORLD
HERITAGE AREA, WESTERN AUSTRALIA

By

Kelly Jeanne Chapman

A thesis submitted in partial fulfilment
of the requirements for the degree of
Master of Science (Environmental
Management)

Edith Cowan University

Faculty of Computing, Health and Science

March 2004

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Kelly Chapman

6 December 2004

ABSTRACT

This thesis examines a participatory approach to interpretive planning, employed in the Shark Bay World Heritage Area, Western Australia. At the project outset relations between the conservation agency responsible for administering World Heritage and the local community were strained, and complicated by a history of conflict over the World Heritage listing and subsequent management of the area. A participatory approach to interpretive planning was adopted in the hope that doing so would achieve the following: improved relations between polarised stakeholder groups, increased community support for the plan and its implementation, and improved access to the variety of knowledge pools within the Shark Bay community.

Effectively engaging and integrating the interests of the area's polarised stakeholders meant that their social, political, organisational and disciplinary divisions had to be overcome. To do this, a novel participatory interpretive planning method was developed using action research. This method employed a combination of techniques, including a modified Delphi Technique based on in-depth interviews, key informants, and direct prolonged immersion of the researcher in the community. The practical results of the project were the production of a stakeholder-derived communications strategy and interpretive plan for the World Heritage Area. These products embodied the collective social, cultural, economic and environmental interests of Shark Bay stakeholders, and included agreed-upon objectives, messages, stories for representing Shark Bay to the outside world.

The participatory planning process also resulted in a number of instrumental and transformative outcomes including: surfacing of latent community issues, quieting of dominant rhetoric, identification of common values among stakeholders, collection of knowledge from multiple sources and contexts, equalisation of power between community segments, empowerment of marginalised community members, creation of social capital, and generation of support and commitment to plan implementation. In addition, the study demonstrated that participatory processes are vulnerable to cooption and manipulation by powerful stakeholders, and that the success of such processes relies more on the creation of trusting relationships (i.e. social capital) between stakeholders and facilitators than on the application of formulaic group techniques used to garner public input.

With respect to interpretive planning, this project showed how a participatory approach to interpretive planning can be used as an ethical means to develop multiple narratives for interpretation that are just and legitimate representations of

the community's interests and stories. Other implications of this project, particularly in relation to the creation of social capital and horizontal and vertical relationships between community and agency groups, indicate that participatory interpretive planning can be used as an intervention in situations where conservation initiatives have resulted in conflict with local communities. Positive change is achieved through the creation of a common platform of values, mutual understanding and knowledge, from which further dialogue and reciprocal cooperation can take place. The evidence presented suggests that the stakeholder-centred approach to interpretive planning used in Shark Bay may form a useful basis for collaborative environmental management in a range of contexts and landscapes where new conservation initiatives are being contemplated. Lessons learned through application of this novel approach to interpretive planning may prove useful to interpretive professionals, environmental managers, governments and businesses attempting cross-disciplinary integration of multiple stakeholder interests.

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GLOSSARY

Communication. Communication can be defined as the “successful transmission of thoughts or ideas, without significant distortion, so that understanding is achieved” (Fazio and Gilbert, 1986).

Interpretation. Interpretation is an educational activity that “aims to reveal meaning about our natural and cultural environment” (Beck and Cable, 1998).

Ecosystem Health. “Ecosystem health is an integrative field that acknowledges and explores the interrelations between human activity, social organization, ecological systems, and human health” (Rapport *et al.*, 1998).

Action Research. “Action research is a qualitative research approach which has the dual aims of action and research: action to bring about change in some community, organization or program, and research to increase understanding on the part of the researcher and/or client” (Dick 1993).

Stakeholder. “Any group or individual who can affect, or is affected by, the achievement of a corporation’s purpose” (Freeman, 1984).

ABBREVIATIONS AND ACRONYMS

CALM. Western Australia Department of Conservation and Land Management

SBWHA. Shark Bay World Heritage Area

WA. Western Australia

NGO. Non-government organisation

"Every spoken word arouses our self-will."

- Johann Wolfgang Von Goethe

INTRODUCTION AND STUDY ORGANISATION

'There is nothing more difficult than to achieve a new order of things with no support from those who will not benefit from the new order, and only lukewarm support from those who will.'

-Machiavelli, *The Prince*, 1514

Shark Bay was declared a World Heritage area in 1991 because of its globally outstanding natural values. To gain World Heritage status, a natural site must meet one of four strict criteria set out by the World Heritage Committee. Shark Bay is one of only 144 natural sites around the globe that have been awarded World Heritage status, and one of only sixteen (as of 2003) that meet all four of the criteria.

However, Shark Bay's World Heritage listing has not been without problems. According to historical writer, Hugh Edwards (1999, p.363), Shark Bay "is a place where changes of any kind—barring an improvement in the weather—have seldom been welcome." Many residents were disgruntled with the surge in tourism that followed when the 130 km stretch of road between the West Coast Highway and Denham was finally sealed in 1985, effectively linking Shark Bay to the outside world. Unsurprisingly, the proposal for World Heritage listing in the late 1980s was not welcomed by an overwhelming majority of local residents, who felt the listing would close down industry, jeopardise their lifestyles, remove large parcels of land from traditional use, and result in outside, non-representative interference in local decision-making by state, federal and international government agencies. This opposition was so fierce that the conflict made the cover of *Time Australia* magazine (November 28, 1988). Nonetheless, as part of a 1990 pre-election promise, the Federal government pushed ahead with World Heritage listing for Shark Bay, despite the vehement opposition of Shark Bay residents.

However, the listing did not take place without concessions from the Federal government. Pastoral, fishing and shell mining industries were maintained within the World Heritage area, while the Denham townsite and salt mining operations were totally excised. Edwards (1999) quotes an editorial from the *West Australian* newspaper: "In spite of the controversy and confusion that preceded it, the agreement between the State and World Heritage nomination appears to be a reasonable compromise that will safeguard both the environment and human activity in the area." (*West Australian*, 4 October 1990, cited in Edwards, 1999, p.383).

Despite these final concessions, and the eleven years that have passed since the World Heritage listing, much of the original opposition remains, and many local people still feel that government management agencies are often indifferent to the needs of the community. Some local people also feel that they are ill-informed by management agencies, and are not given genuine opportunities to provide input and influence management planning. Others feel that World Heritage listing has been socially damaging because it has created long-standing divisions within the community, and resulted in

marginalisation of the original inhabitants (primarily fishers of Aboriginal-Malay descent) because of increases in tourism and tourism related economy.

The lack of local understanding as to *why* Shark Bay is a World Heritage area has compounded these problems. Thirty-nine World Heritage values have been identified for Shark Bay. These values arise from a complex interplay between geomorphological, hydrological, evolutionary and biological factors, and as a consequence are difficult for non-scientists and non-specialists to appreciate or understand.

Improved communication is clearly an essential first step for repairing the rift between management agencies and the local community, and for raising awareness and appreciation for the reasons why Shark Bay is a globally outstanding area. Yet despite this, the approach to communications and interpretation in the Shark Bay World Heritage Area (SBWHA) had been *ad hoc* until recent times. Individual government agencies and tourism operators have independently developed their own messages and communications materials to suit their respective corporate objectives. As a result, there are few consistent messages as to why Shark Bay is globally outstanding, or how people ought to conduct themselves when in the area. Information that is available is often outdated, inaccurate, and/or reflective of the corporate objectives of the agency or company that produced the information, rather than World Heritage principles and values. Consequently, there is often patchy, incomplete information explaining the reasons for Shark Bay's World Heritage status in lay terms.

This lack of a coordinated approach to communications in Shark Bay has had a number of consequences. Presently, few people—including locals, visitors and government agency staff—have a clear or complete understanding as to why Shark Bay is a World Heritage area. Some scientists with long-term research interests in the area feel that their work has not been adequately translated into management action or educational material. In addition, residents have sometimes felt that agencies do not sufficiently recognise that the history, identity and aspirations of the local residents are also an important part of the Shark Bay story.

Lack of communication and a low state and nation-wide profile have also made it more difficult to raise support, cooperation and resources for management and conservation activities in the area. In addition, given the area is very large, of mixed tenure, and with few regulatory staff available to enforce regulations, inappropriate activities remain a problem because visitors are not well-informed, and residents are not on-side. It has also meant that the local population has not seen as much social and economic benefit from World Heritage listing as it had hoped, because visitors are not aware of there being much to see or do in the area beyond visiting Monkey Mia, Shell Beach and the stromatolites, or going fishing.

In order to help remedy these problems, the researcher was contracted by the Department of Conservation and Land Management (CALM) in 2001 to develop an interpretation and communications plan for the SBWHA that would improve relations between stakeholders in the SBWHA, improve coordination of communications between the various agencies, and increase commitment to and understanding of World Heritage among stakeholders and visitors.

In recognition of Allen's (2001) observation that environmental issues can only be effectively resolved by fostering commitment and understanding among those involved in the change process, and given the context of the proposed planning exercise, it was the researcher's belief that a conventional strategic planning cycle would be ineffective in this case. She felt that a convergent approach, bringing together biological, social and economic knowledge into a common values platform, would be required to generate a bottom-up strategy supported by the array of Shark Bay stakeholders.

This required the adoption of a participatory approach to developing the plan. Key stakeholders—who would potentially affect support and delivery of the plan—would be directly engaged in the plan development. A participatory approach was selected on the assumption that stakeholder engagement in the planning process would result in the following: improved relationships and communication between stakeholders, a larger knowledge base for developing the plan, increased understanding and commitment amongst stakeholders, and a plan that was directly meaningful and relevant to stakeholder interests. It was hoped that the participatory process would thereby begin to achieve the primary objectives of the interpretation and communications plan, *before* plan implementation.

There was, however, no suitable pre-existing methodology to guide a participatory interpretive planning process for the SBWHA. Despite increasing recognition of the value of participation in planning for environmental management, notions of greater collaboration with the public and other stakeholders have not had as much carry-over into interpretive planning for parks and other areas of conservation significance. Traditionally, interpretive planning has been used as a tool for increasing public compliance and support for management objectives developed by government agencies, and has taken the form of traditional 'public relations', whereby stakeholders are targeted with careful and persuasive messages, with little genuine dialogue or two-way communication. Although interpretive practitioners have increasingly identified the need for greater community involvement in the interpretive planning process, there is very little literature describing methods for engaging communities in such processes, or the outcomes or implications of such processes on the relevance and effectiveness of interpretation or on environmental management generally. Literature which describes participatory planning methods tends to focus on workshops and other group planning techniques, approaches unsuitable for Shark Bay, given the hostility that often erupts during public gatherings because of the community being highly polarised over World Heritage related issues.

In absence of a tested methodology to guide the planning, the researcher borrowed components from existing interpretive and communications planning models, and reworked them where necessary to accommodate stakeholder participation. From this, a loose planning framework was created, which was then allowed to evolve, change and solidify with input and direction from participating stakeholders through the adoption of an action research approach. The methodology and the response of the local community and other stakeholders to the planning process were recorded in order to provide a documented process for consideration by other interpretive and communications practitioners, and to provide an analysis of the process outcomes, particularly as they pertain to communications, interpretation, ecosystem health and environmental management in areas of conservation significance.

1.1 The Purpose of the Study:

Action research studies are characterised by having dual aims of *action* and *research*: action to bring about change in some community or organisation, and research to increase knowledge and understanding on the part of the researcher and client. Thus, the purpose of this study was twofold. Firstly, it aimed to generate *action*, by developing communications and interpretation plans for the Shark Bay World Heritage Area in collaboration with key stakeholders, and in doing so, improve stakeholder relations with respect to environmental management of the area. Secondly, the study aimed to generate *knowledge*, by examining participatory methods used to engage a hostile, polarised community, analysing the outcomes of a participatory approach to communications and interpretive planning, and exploring the implications of these outcomes for interpretive planning and strategic environmental management in the Shark Bay World Heritage Area.

1.2 Research Questions:

The research questions posed by this study are as follows:

1. What participatory methods can be used to engage a polarised community in a collaborative planning process?
2. What sorts of outcomes are derived using a participatory approach to communications/interpretive planning for environmental management?
3. What are the implications of these outcomes in relation to interpretive planning?
4. What are the implications of these outcomes to environmental management?

1.3 Organisation of the Study

This thesis is organised into five chapters. It starts with this introduction outlining the study context and research questions followed by a brief literature review outlining the conceptual framework that informed the study at its inception. Next is an outline of the project methodology followed by a detailed practical description of the project chronology and a stakeholder evaluation of the program. The final chapter presents a detailed theoretical reflection on the project outcomes and final conclusions in relation to the study's implications for interpretive planning and environmental management.

Chapter 1: Introduction and Study Organisation

Chapter 1 introduces the situation that provided the impetus for this study. Relations between the local conservation agency responsible for administering World Heritage and the local community were strained, and complicated by a history of conflict and resistance of the local community to World Heritage listing and the conservation agency's administration of the area. As a consequence of this and poorly integrated *ad hoc* approaches to communications among the various organisations in the area, there was poor awareness as to why Shark Bay was a World Heritage area. A participatory approach to communications planning was decided on, as a means of repairing relations with the local community and increasing appreciation for the area's World Heritage values. The chapter then follows with an outline of the purpose of the study and the research questions.

Chapter 2: Conceptual Framework

Chapter 2 outlines the fields of knowledge that informed this study at its outset. It presents evidence that rationalises the need for this study, including ethical concerns related to the following: levels of participation and the strength and legitimacy of planning decisions; attempts by scientists to influence public opinion with one-way, persuasive communication; and the failure of the Western paradigm of protected area management to acknowledge the historic and ongoing interconnections between humans and landscapes as is necessary for ecosystem health. It also describes the managerial importance of participation in successful delivery of strategy or change. The chapter goes on to provide an overview of some of the documented benefits and pitfalls of participation and uses these to define a loose conceptual framework for the study. It also points out research gaps, noting that genuinely participative processes are rare and little studied, and that outcomes of participatory interpretive planning processes have been poorly documented. Nor have the effects of such processes been adequately examined from the perspectives of participants or in terms of their implications with respect to interpretation, environmental management and notions of ecosystem health.

Chapter 3: Methodology

Chapter 3 outlines and justifies the methodology used for the project. It begins by describing the principles of action research, and compares action research to quantitative research methods. This is followed by a justification of why an action research was used as an approach to engage stakeholders in this study. The chapter then discusses issues associated with ensuring 'just' participation, and the usefulness of the Delphi technique in circumventing group dynamics. The methods used to collect data are also described, including in-depth interviews and key informants, as are means of triangulating and member checking the data.

Chapter 4: Project Chronology And Practical Reflections

Chapter 4 presents background information for the study followed by a detailed chronology of the project. This chapter presents the researcher's chronicle of the two action research cycles used by the study, and the various plan, act and reflect stages of each cycle. The first cycle involved engaging stakeholders in devising and prioritising objectives, key messages and evaluation methods for a communications strategy for the SBWHA. Methods used for this cycle included in-depth interviews with 115 stakeholders, and a modified Delphi round used to formulate, rank and gain consensus on proposed communications objectives and messages. The second action research cycle involved engaging stakeholders to develop story ideas and garner local and technical advice for a detailed SBWHA interpretive plan. This was done by undertaking a series of informal and formal meetings, interviews and workshops with key informants identified in the first action research cycle. This chapter includes *practical* reflections on the outcomes of both action research cycles, as well as a stakeholder evaluation of the process. Theoretical reflections on the project outcomes are excluded from this chapter and are instead discussed in-depth in Chapter 5.

Chapter 5: Outcomes and Theoretical Reflections

Chapter 5 provides a detailed description of the instrumental outcomes of the planning process, such as: finding common ground in a polarised community, the legitimacy and representativeness of the process, the effectiveness of the process in tapping into knowledge collectively held by the community and the level of support and commitment for the plan and its implementation. This chapter also looks at transformative outcomes of the project, including community empowerment and the creation of social capital. The role of power in participatory processes and associated pitfalls are also analysed, as is the role of the facilitator in ensuring the fairness and legitimacy of participatory processes. This is followed by a discussion of the implications of using participatory methods for interpretive planning, particularly as an ethical basis for developing multiple narratives, and for improving the uptake of knowledge through double-loop learning. The chapter concludes with a discussion on the implications of the study's findings with respect to conventional environmental planning, and suggests an alternative, communications-based approach to environmental planning that is consistent with notions of ecosystem health, post-normal science and transdisciplinary sustainability.

CONCEPTUAL FRAMEWORK

"We are not going to be able to operate our Spaceship Earth successfully nor for much longer unless we see it as a whole spaceship and our fate as common. It has to be everybody or nobody."

-Buckminster Fuller

2.1 Introduction

Most qualitative research is seen as being free from predetermined theories and questions (Jacob, 1988), which generally emerge after data collection, as opposed to before. This study sought to document outcomes of a participatory planning process that had not been previously described in the environmental management or interpretive planning literature. Such outcomes have undoubtedly been described for other fields of study, particularly international development and health care research; however, the researcher refrained from reviewing literature in these other fields until the study was completed, in an effort to minimise the influence of preconceived notions on data collection. Thus, contributions from these fields are incorporated in the discussions of Chapter 5 rather than in this section.

Despite the need to remain relatively 'theory-free' at the start of qualitative studies, Eisenhardt (1989, p.536) notes that a "priori specification of constructs can also help shape the design of theory-building research" by permitting more accurate measurement of constructs during the research. Thus the researcher conducted a limited literature search at the project inception.

For this study, the concept of ecosystem health—which assumes that the health of human communities and ecosystems are interrelated—is the fundamental underlying framework of this environmental management study. However, the study is also informed by an array of other fields: action research as a methodology to enhance democratic decision-making and social innovation, and the importance of 'just' participation in garnering commitment towards organisational change (these topics are dealt with in the methodology section of Chapter 3); participation and multi-lateral communications and their role in negotiating priorities for ecological policy and supporting environmental management and ecosystem health; and interpretive planning for parks and protected areas and levels of penetration participatory notions have had in this arena in different parts of the world. While these fields represent somewhat disparate disciplines, they are nonetheless important and inter-related vehicles for achieving ecosystem health and supporting environmental management in socially and economically complex landscapes.

This chapter outlines the fields of knowledge that informed this study at its outset. Its purpose is to:

- rationalise the need for this study;

- review and analyse existing research relevant to participation in environmental management and interpretive planning, and identify knowledge gaps in the literature; and
- define a loose conceptual framework relating to presently acknowledged outcomes of participatory processes in the field of environmental management.

2.2 Study Rationale

2.2.1 *Participation from an ethical and ecosystem health perspective*

Historically in Australia, conventional planning cycles used by government agencies often incorporated little genuine public participation. Rather they tended to adopt following sequence: decide on a course of action, announce the decision, and then defend the decision from ensuing protests (Government of Western Australia Citizens and Civics Unit 2002). Where planning did incorporate public involvement, it was often limited to obtaining public feedback on analysis, alternatives, and/or decisions (Government of Western Australia Citizens and Civics Unit 2002).

Levels of public participation are particularly relevant to environmental management decisions, because such decisions affect land tenure, patterns of resource use and settlement, and the lives and livelihoods of people. Pimbert and Pretty (1995), in their report to the United Nations on the ethics of excluding people from protected areas, observe that governments have typically decided what areas are to be protected and how they should be managed, with little or no input from local people. They argue that local knowledge, skills, and institutions, fine-tuned over generations of observation and adaptation to the local environment, are frequently ignored in favour of scientific knowledge provided by external 'experts', who typically make recommendations on the basis cursory surveys and the narrow foci of their respective disciplines. In addition, these decisions are often made with little attention to the socio-economic effects on local people excluded or displaced from the protected area (Pimbert and Pretty 1995).

However, in Australia and other Western countries, public expectations are changing—people are more articulate and informed, and they expect to be more involved in decision making. Government (and other) organizations increasingly recognise that engaging the community in consultation is good practice (Government of Western Australia Citizens and Civics Unit 2002). According to a report prepared for the Organisation for Economic Cooperation and Development (Caddy & Vergez 2001, p.4) greater participation by citizens allows governments to “tap wider sources of information, perspectives and potential solutions, and improves the quality of decisions reached...(It also) contributes to building trust in government, raising the quality of democracy, and strengthening civic capacity.” Other reasons for the growing advocacy for participatory approaches to decision-making and policy development include decentralisation of government and devolution of responsibility to community groups (Swanson 2001), and recognition of the value and local expertise community members have to offer (Robertson *et al.* 2000). Over the last three decades, government agencies involved in environmental management have increasingly embraced the trend toward greater public participation in decision-making. In addition, the increasing complexity of environmental issues, and the social and economic implications of environmental management decisions, have highlighted the need for genuine cross-sectorial integration and collaboration in research and decision-making (Funtowicz & Ravetz 1994, WHO 1997, Neller 2000).

Increased public and cross-sectorial (i.e. stakeholder) involvement in environmental decision-making is consistent with notions of ecosystem health. Ecosystem health is an integrative field exploring the interrelations between human activity, social organization, ecological systems, and human health (Rapport *et al.* 1998). The issues emerging as a result of ecosystem degradation at global, regional and local scales indicate the fundamental relationship between human health and the sustainability of natural ecosystems (Postel & Carpenter 1997, Gleick 2000). Failure to acknowledge the human dimension of landscapes and exclusion of local people from these landscapes and associated management decisions has far reaching consequences, not only in terms of social impact but also on conservation success. Many "new conservation" scientists, such as Pimbert and Pretty (1995), argue that degradation of natural resources is more likely to occur in areas where local people are excluded. They cite examples of intensified poverty and environmental degradation in areas surrounding parks and reserves, growing rural conflicts with the deterioration/dismantling of traditional land management systems, attacks on park personnel, protests and rallies, and poaching, burning and damaging of park resources.

Numerous authors argue that societal preferences, as opposed to the goals of external 'experts', should drive the environmental management goals inherent in achieving ecosystem health (e.g. Gaudet *et al.* 1997, Meyer 1997, Meppem & Bourke 1999). Lackey (2001) notes that identification of stakeholders and how their conflicting input should be used to define ecosystem health must be considered for any specific ecological policy issue. To do this, understanding the values and preferences of society is crucial, and public involvement critical. For this to occur, effective, *two-way* communication between environmental decision-makers and other stakeholders is critical.

Yet despite the increasing importance of two-way communication between decision-makers and stakeholders in environmental planning, notions of greater collaboration with the public and other stakeholders have had limited carry over to communications planning. Traditionally, government communication with stakeholders has taken the form of traditional 'public relations', whereby stakeholders are targeted with careful and persuasive messages, with little genuine dialogue or two-way communication (Gardner, 2001). This approach is considered by many to be both ethically questionable (Weiss 1988, McKenna 1999, Greenwood 2000) and ineffective (Grunig 1996). Gardner (2001), following Mintzberg (1994), argues that strategic planning approaches using traditional forms of communications do not effectively integrate organisational activities or the intelligence required for effective executive decisions.

Scientists and environmental management agencies often adhere to this traditional 'public relations' approach of informing the public and decision-makers, by attempting to influence decisions on the basis of 'objective' scientific research, which is presented as a convincing argument to be bought by other stakeholders and the public. The efficacy of this traditional approach is also challenged by Weber (2001, p.2), a communications scholar, who notes that "compelling scientific information very often runs aground almost as soon as it is launched into the choppy waters of public discourse." Weber's work (2001) indicates that non-scientists don't automatically perceive scientific information to be objective and neutral, and are often suspicious that scientific information posing as purely informative is really agenda-driven and meant to be persuasive.

Non-scientists aren't the only ones to question scientific objectivity, particularly with respect to ecology; according to some, ecology has become a belief system, surreptitiously labelling personal values and policy preferences as "science" (Salzman 1995). Lackey (2001) argues that scientific descriptions or measures of ecosystem health are not value neutral. For instance, Lackey (2001) notes that concepts such as biological diversity, extinction, ecological complexity, and evolution do not have intrinsic value. These concepts only become good or bad when they are strained through the filter of the ecological profession's own collective value system. On this basis, Lackey (2001) argues that it is essential that the values of scientists and technocrats not be used as surrogates for societal values and preferences when developing ecological policy.

With neither scientists nor non-scientists being convinced of the value-neutrality of scientific information, it is unsurprising that attempts to persuade public opinion using "objective" scientific research are often unsuccessful. This phenomenon has been documented in the USA's Pacific Northwest by Johnson and Campbell (1999), who show that although both the public and scientists have a large influence on public policy, they have little exchange with or influence on each other, and as a result tend to enter and leave negotiations having had little effect on each other's positions. Johnson and Campbell (1999) note that dialogue between scientists and other stakeholder groups is fraught with resistance and scepticism from both parties, with stakeholders viewing scientists as outsiders with vested interests or beliefs, and the scientists viewing stakeholders as impinging on academic freedom and sound science. This makes decision-making and consensus building drawn-out and difficult. It also provides little opportunity for the two groups to work together and creatively and synergistically generate mutual vision and social, organisational, and policy innovation¹.

Weber (2001) concludes that science communication must be viewed as a process as well as a product, and that although scientists can raise public awareness of critical issues, they do not stand above the process of negotiating meanings or creating constructive public dialogue. The benefits of two-way dialogue are also identified by Robertson *et al.* (2000), who argue that ecologists should acknowledge the rigour of ecological knowledge gained through detailed observations of landscapes over lengthy time periods by non-scientists. Likewise, Johnson and Campbell (1999) and Yaffee (1996) argue that resolution of complex social, economic and ecological issues require two-way communication to create understanding between ecological science and diverse stakeholder groups. In order to achieve this, local projects must be undertaken that benefit both residents and the environment, and linkages between economic well-being and ecosystem integrity must be recognised and strengthened (Johnson & Campbell 1999).

2.2.2 *Participation from a managerial perspective*

The importance of participation is also recognised in organisational management literature, particularly with respect to change management. Eden and Ackerman, in their 1998 book *Making Strategy*, stress the importance of participation and stakeholder management in strategy-making for organisational change. There are two essential

¹ Although there are many examples of scientists and non-scientists failing to collaborate on policy matters, there are also more recent examples where such collaboration *has* taken place, such as the Great Barrier Reef Representative Areas Program (see: www.rcefcrc.org.au/research/manage/representarca.html).

processes in strategic management: developing strategy and implementing strategy. Eden and Ackerman (1998) note that many of the difficulties organisations experience in trying to implement solutions to their problems have their root in the problem identification stage, not in the implementation stage. They note that that much of the literature related to strategic management focuses almost entirely on rational analyses of external factors (eg. stockholders or competitors) resulting in logic-driven outcomes. These analyses fail to realise that the *delivery* of strategy is dependent on the social process of strategy negotiation with those internal to the organisation and that “strategic management is about people creating outcomes, not just outcomes” (Eden & Ackerman 1998, p.11).

Eden and Ackerman (1998) observe that strategy-making usually results in organisational change, which is perceived by many within the organisation as threatening or beneficial to themselves; these perceptions trigger political manoeuvring among internal stakeholders as they work to obstruct or facilitate strategy delivery, which in turn can jeopardise the political feasibility of the strategy. Participation of stakeholders, including saboteurs as well as supporters, in structured negotiation designed to promote group learning, will help to change how people see things and generate new frameworks for strategy-making and problem solving (Eden & Ackerman 1998).

Thus it can be argued that successful delivery of strategy is dependent on the inclusion of those within the organisation who have the power to influence strategy implementation in the strategy-making process. If internal stakeholders are excluded from decision-making processes, they are unlikely to be motivated to implement changes or solutions, and implementation of the strategy will have to rely on coercion and manipulation instead (Eden & Ackerman 1998).

The assumptions underpinning participatory strategy-making also resonate in Allen’s (2001) observation that the growing use of participatory methods—such as action research— in environmental management recognises that natural resource management issues are not so much problems requiring answers as they are issues requiring one or more of the parties changing their views in order to be resolved, i.e. social change. The underlying assumption of participatory approaches is that “effective social change depends on the commitment and understanding of those involved in the change process” (Allen 2001, p.3.10). Gardner (2001) proposes a strategic, dialogue-driven and inclusive approach to stakeholder management aimed at positioning and building agency reputation, and achieving balanced financial, social and environmental outcomes.

2.3 Critical Analysis of Relevant Research

2.3.1 Participatory approaches to environmental management planning

For reasons discussed in the previous section, attempts to more realistically represent the collage of human interests embedded within any given landscape (rather than just values rationally dictated by natural sciences) have led to increasing public participation and incorporation of multiple stakeholder objectives in environmental planning processes. In recent years, much research has focused on public participation in environmental planning (e.g. Hobbs *et al.*1993, Stocker 1996, Baker 1997, Frost & Metcalf 1999, Eden & Ackerman 1998, Nickoll & Horwitz 2000, Robertson *et al.*2000, Hjortso in press), and the effects of public participation in decision-making processes have been increasingly studied and recognised (e.g. Caddy & Vergez 2001). These benefits are summarised by Pelletier *et*

al. (1999) as: improved knowledge base for policy design (e.g. Robertson *et al.* 2000); increased likelihood of stakeholder compliance and support (Eden & Ackerman 1998, Luz 2000); and strengthened democracy and legitimacy of decisions reached.

Researchers have also identified some of the pitfalls associated with public participation, including: contention, co-option and manipulation, and stalemate (Johnson & Campbell, 1999), as well as reinforcement of unequal power relations (Swanson 2001) and inhibition of activities which threaten the status quo despite potential group benefits (Coleman 1990, Putnam 1995, Salamon *et al.* 1998). Swanson (2001), in his study on the effects of direct local participation on rural policy in the USA, notes that despite strong recent trends to celebrate community there are perils associated with localism. In particular, he notes that “the much-idealized American community of the past may have been democratic for the local male property owner of European ancestry, but it was not inclusive nor democratic for the majority of workers, women and minority citizens” (Swanson 2001, p.6). Swanson (2001) argues that inclusive locality-based programs can reinforce local economies' cultural patterns of racism and elite control.

Despite increasing public participation in environmental planning (see e.g. in: Wondolleck *et al.* 1996, Solberg and Mina 1997, Hinchcliffe *et al.* 1999, Kay & Alder 1999, Allen 2001, Daniels & Walker 2001, Jackson 2002), methodologies used to engage the public in natural resource management decision-making in the Western world have often focussed on disseminating information, public hearings and conferences, and use of advisory groups. The more genuinely participative methods that make use of consensus building, collaborative decision-making, and conflict management are relatively rare and little studied (Hjortso in press), despite the social and economic implications of environmental management decisions (Funtowicz & Ravetz 1994, WHO 1997, Neller 2000) and widespread use of participatory methods in other fields such as international development and health care research.

2.3.2 *Participation in Communications and Interpretation Planning*

Many ecologists now recognise the need to inform the general public and decision-makers of their scientific findings (Bazzaz *et al.* 1998, Lubchenco 1998), and good communications and education programs have long been recognised as essential to environmental management in countries like Australia, where vast areas are regulated by small numbers of agency staff (CALM 2001). This is because in areas where enforcement presence and management resources are low, protection of conservation values can only be brought about through responsible and cooperative public behaviour, public support for management decisions and wide-spread appreciation for natural values. However, with the public being invited to have a more active role in environmental planning, communications are now more than ever a critical component of environmental management. This is because when undertaking participatory planning, a public which is well-informed about environmental issues is clearly preferable to one which is ill-informed.

Interpretation is a form of communications that is widely acknowledged as having a central role in conservation and environmental management (Earthlines Consortium 1999, CALM 2001, Staiff and Bushell 2002), despite some concerns about its effectiveness as a management tool (Orams 1996, Figgis 1999). Most members of the Australian and New Zealand Environment and Conservation Council (ANZECC) Group of Agencies,

for example, consider interpretation and education to be a core function in their operations (Earthlines Consortium 1999). There are numerous definitions of interpretation. The one provided by Interpretation Australia (2003) describes interpretation as "...a means of communicating ideas and feelings which enrich people's understanding and appreciation of their world and their role within it."

The definition outlined by CALM's Interpretation Unit is focused on the relevance of interpretation to the park *visitor*.

Interpretation is the craft of enriching visitor experience. It is an interactive process involving the visitor, the medium and resource, which creates memorable and personal experiences which motivate people to greater understanding and care of the environment being interpreted, as well as an appreciation of the effort required to protect and sustain the environment. Interpretation helps visitors to develop knowledge, skills, attitudes/values and appropriate actions. (CALM 1988)

Some of the benefits of interpretation have been outlined in the *Best Practice in Park Interpretation and Education* report to the ANZECC Working Group on National Park and Protected Area Management (Earthlines Consortium 1999), and in CALM's *Visitor Interpretation Manual* (CALM 1988). For visitors, these documents identify the benefits as:

- improved awareness as personal needs for information and explanation are met;
- increased appreciation and understanding of the site being visited;
- better understanding of what to expect during their visit;
- enhanced experience and enjoyment; and
- improved ability to make choices for a safe, enjoyable and minimal impact experience in the area.

For the protected area and its managers the benefits are summarised as:

- improved protection of natural and cultural resources and reduced need for enforcement and rescue as visitors are educated about issues and appropriate behaviours;
 - enhanced image and reputation of the heritage site and its managers;
 - increased understanding and support for management decisions;
 - greater community ownership of area and involvement in conservation activities;
 - increased funding for conservation and management activity;
 - more sympathetic management of neighbouring properties; and
 - environmentally aware citizens who value the area's natural and cultural heritage.
- (CALM 1988; Queensland Department of Environment and Heritage 1998, Earthlines Consortium 1999)

As is apparent from these outlined benefits and the way in which CALM (1988) defines interpretation, interpretation in Australian parks and protected areas has traditionally focused on the benefits it can bring to protected area management and to park visitors. Consideration of the socio-economic benefits interpretation can potentially bring to local communities in which protected areas are embedded is absent in the above points, and the role of the community is relegated to that of compliance with park management objectives and helping with conservation activity. This perspective whereby the community's influence and role in protected areas is limited to that of either visitor or

helper is a consequence of the historic origins of parks and protected areas. The notion of protected areas as panaceas for conservation arose in the 19th century. Yellowstone National Park, established in 1872, was one of the first protected areas. The US Army drove the Crow and Shoshone inhabitants out of the area to create the park (Morrison 1993 cited in Pimbert & Pretty 1995), and established a management policy which protected the park from local community use, reserving the area solely for use by tourists and visitors (Pimbert & Pretty 1995). Yellowstone has since served as a model for national parks around the globe. Protected areas now cover almost 8 million square kilometres in 169 countries (Pimbert & Pretty 1995), and have resulted in displacement, resettlement and loss of livelihood for millions of people. Protection of areas from human interference has long been viewed by many scientists and policy makers as having a pivotal role in conservation (e.g. Figgis 2002). However, the concept of pristine "wilderness" devoid of people is a Western mythology because it fails to acknowledge that virtually every landscape on earth, with the exception of Antarctica, has a long history of human use and modification. It is also a concept fraught with imperialism because it fails to value the ubiquitous and endemic human components of these landscapes.

Because of this failure to acknowledge that landscapes both shape and have been shaped by the people living there (Crang 1998), and because traditional interpretive planning operates within a Western scientific and positivist paradigm, interpretation in parks and other areas of conservation significance has typically focused on environmental messages informed by the natural sciences. Historic facts relating to both indigenous and non-indigenous peoples are also used to a lesser degree in parks interpretation; however, indigenous peoples are often presented in their pre-settlement form as a 'dead' culture with little reference to their contemporary society (Leader-Elliott 2003), and non-indigenous history is often presented from the perspective of the white pioneering male with little reference to ethnic minorities, women and children.

However, an increasing number of authors and environmental management agencies have identified the need to discard the traditional approach to interpretation in favour of a *multiple narratives* framework, which accounts for the multiple cultural meanings of a landscape (Hall & McArthur 1996, NPWS 1998, Staiff & Bushell 2002). Incorporation of multiple meanings and cultural perspectives into park interpretation raises the question of *who* decides on matters regarding interpretive content, and *who* is best placed to plan and deliver such interpretation (Staiff & Bushell, 2002). These questions point to a community consultation process, whereby the people whose culture and place is the subject of interpretation have a say in what is interpreted and how (Leader-Elliott 2003). Byrne *et al.* (2001) recommend a heritage assessment process that involves community members in determining the whole range of heritage values relevant to a particular place or landscape.

The need to involve community in devising multiple narratives, however, appears to have had limited real-world penetration in the arena of interpretation for parks and protected areas, as many influential publications pertaining to interpretive planning (e.g. Veverka 1994, Beck and Cable 1998, Knudson *et al.* 1999) do not identify community consultation or participation as a component of interpretive planning or determining interpretive content.

The Planning for Interpretation and Visitor Experience guide prepared for the US National Parks Service (Harpers Ferry Center 1998) notes that history can be narrated from multiple perspectives. It suggests that consideration of different points of view is essential to ensuring interpretation remains "relevant and contemporary." According to the guide, one way of deciding what is worth interpreting or "knowing" is to apply Freeman Tilden's principle of relating interpretation to *visitor's* experiences (Tilden 1957) by asking:

...how did today's society develop? What are the human roles in the 'natural world'? What in our past holds meaning for us individually? as children? as women? as men? as Americans? as American Indians? as descendents of immigrants or of the enslaved? as laborers? as business owners? (Harpers Ferry Center 1998, p.31)

Yet despite recognising the importance of different perspectives and the role of humans in nature, nowhere does the guide broach the topic of community consultation or participation in determining content for interpretation. Rather the guide vaguely suggests that content be developed by the interpretive specialist applying sound scholarship and research methodology. Likewise, the *National Park Service Interpretation and Education Guideline* (Department of the Interior National Park Service 2000) states that Long Range Interpretive Plans are to be prepared by parks staff and "park partners/community" with the help of a facilitator skilled in interpretive planning, but makes no further mention of community except to acknowledge the role of partnerships with friends groups, cooperating associations, and schools in the *delivery* of interpretive services.

The apparent exclusion of formal community consultation from interpretive planning processes is not isolated to the USA. ANZECC's *Best Practices in Park Interpretation and Education* (Earthlines Consortium 1999), identifies involvement of community in defining broad organisational goals for interpretation as 'best practice'. This report confirms that some Australian/New Zealand agencies actively seek stakeholder and community input during interpretive planning process to ascertain community values, needs and interests in relation to interpretation (Earthlines Consortium 1999). It also specifically identifies the following as benefits associated with public participation:

- increased quality of decisions— by providing further sources of expertise and information, identifying different perceptions, and by considering the concerns of all affected/interested parties.
- improved credibility.
- planning focused on issues of community concern.
- increased productivity through reduction in frequency of acute adversarial situations.
- increased ease of implementation— through higher levels of commitment to a decision by interest groups with a stake in the decision.
- increased awareness and understanding of the agency's business.
- meeting corporate obligations/requirements for public consultation. (Melbourne Water 1994 cited in Earthlines Consortium 1999, p. 23)

However, the interpretive planning model outlined in *Best Practices in Park Interpretation and Education* (Earthlines Consortium 1999) does not identify a role for community in

developing interpretive objectives or in formulating messages and developing interpretive content.

Certainly some level of informal stakeholder consultation is employed by many if not most interpretive practitioners as part of their normal research routines, despite its absence as a major step in many interpretive planning models. In addition, community input is often sought on draft or conceptual interpretive products. Nonetheless, a clearly identifiable and demonstrably 'just' community consultation process is often overlooked as a tool for determining interpretive content early in the interpretive planning process.

In the United Kingdom, however, a number of interpretive planning methodologies have been devised that overtly acknowledge the importance of community involvement. This may be tied to the fact that unlike Australia, Canada and many other countries the UK has not followed the US model of protected area management whereby parks are viewed as wilderness, largely devoid of human influence except that of 'visitor' (Miller 2003). Rather the UK model has adopted the notion of countryside, where human endeavour is allowed to continue within protected landscapes as it long has (Miller 2003).

For example, *A Sense of Place: Interpretive Planning Handbook* (Carter 1997) notes that the "relationships between people and the place they live is often crucial to the message itself" (Carter 1997, p.17), and devotes an entire chapter to "working with others." While *A Sense of Place* acknowledges that working with communities can be frustrating and difficult, it also outlines the benefits of working with communities as:

- Local people will have some collective ownership of the plan, and will support it rather than oppose it.
- The plan and its outcomes will be more sustainable. People will be more interested in seeing that the work is continued and developed.
- Interpretation can benefit from the vast amount of local knowledge and skills which exist. (Carter 1997, p.17)

In terms of interpretive content, *A Sense of Place* (p.22) notes that if interpretation is to "...capture the character of a place, it's worth getting the opinions of those who live there." This handbook provides some general suggestions for working with community groups in terms of consultation, workshop ideas and setting up of planning groups.

Likewise, the *Interpretation and Information Strategy for the Sussex Downs* (Sussex Downs Conservation Board 1997, p.13) outlines an interpretive planning methodology that aims to "involve communities in decisions about what is to be interpreted." They recommend a workshop with key players, including community members, to brainstorm management issues and ideas for themes and projects, and recommend community involvement through the entire planning process.

While numerous studies have examined the effectiveness of various interpretive techniques (eg. Ham 1992, Moscardo 1996, Orams 1996, CALM 1998), the content being interpreted has received less attention (McArthur 1998, Uzzell & Ballantyne 1998, Staiff & Bushell, 2002). As part of their analysis of the assumptions underpinning interpretive approaches in protected areas, Staiff and Bushell (2002) compared interpretive content and products at the Minnamurra Rainforest Centre in NSW before and after a multiple

narratives approach was adopted. They found that interpretive products and programs at the centre now embrace a multiplicity of cultural meanings and concerns (Staiff and Bushell 2002). However, they did not examine the legitimacy of the decision-making process that led to content and product recommendations, nor did they look at the implications of that process in terms of environmental management, conservation, or the broader array of stakeholder interests, thoughts and feelings that the products are meant to represent. At present, there is little research examining the outcomes of participatory and multiple narrative approaches to interpretive planning, particularly from the perspective of the various stakeholders in a landscape.

In addition, although interpretive planning guidelines originating from the United Kingdom have outlined methods for engaging communities, they have focused on group methods such as workshops. Application of these processes becomes difficult in volatile, polarised communities, where locals distrust and resist working with government agencies. At present, methods and strategies for engaging disenfranchised communities in participatory interpretive planning have not been documented in the literature.

2.4 Summary

There is an increasing demand for public participation in government decision-making, particularly in relation to environmental management. Rationale for moving towards increased public involvement in planning processes includes ethical concerns related to: levels of participation and the strength and legitimacy of planning decisions; attempts by scientists to influence public opinion with one-way, persuasive communication; and the failure of the Western paradigm of protected area management to acknowledge the historic and ongoing interconnections between humans and landscapes. From a managerial perspective, participation is important because successful delivery of strategy or change is dependent on the inclusion of those who have the power to influence strategy implementation in the strategy-making process.

Some of the benefits of participation outlined in the literature include: stakeholder compliance and support for management decisions; wider knowledge base for decision-making; and improved quality, legitimacy and local relevancy of decisions made. The literature also identifies some pitfalls associated with participation, including co-option, manipulation and stalemate. Although public participation in environmental planning is increasing, genuinely participative processes that make use of collaborative decision-making are rare and little studied. Nor have the effects of such processes been adequately examined from the perspectives of participants involved in collaborative environmental planning. These benefits and pitfalls form a loose conceptual framework that served as a starting point for this investigation, by shaping some of the questions asked of stakeholders during the study.

Notions of participation have seen limited carry over into interpretive planning, despite recognition of the need to ethically address multiple narratives in contemporary interpretive planning. This is particularly the case in countries such as Australia, where the US model of protected area management has been adopted. In the UK, however, where the notion of countryside enables human endeavour to continue in areas of conservation significance, participation has a recognised role in interpretive planning. Nonetheless, at present the outcomes of participatory approaches to interpretive planning, particularly from the perspective of participants, have been poorly studied and the

implications of such approaches to wider concerns relating to environmental management and ecosystem health are mostly undocumented. In addition, there are no existing participatory interpretive planning methodologies that identify strategies for engaging communities where the politics are problematic.

This study helps to fill these knowledge gaps by: documenting a methodology used to conduct a participatory interpretive planning exercise with a polarised community; testing for the emergence of participatory benefits and pitfalls as documented by the literature; examining the outcomes of the planning process from the perspective stakeholder participants; analysing the ethical and practical implications of these outcomes with respect to generating knowledge and developing multiple narratives for interpretation; and examining the ramifications of participatory interpretive planning in relation to environmental management and notions of ecosystem health.

Chapter 3

METHODOLOGY

"The management of complex natural systems as if they were simple scientific exercises has brought us to our present mixture of triumph and peril"

-J. Ravetz

3.1 Introduction

As with most action research projects, this study began with considerable fuzziness about questions and method. In the absence of a tested, suitable methodology to guide the interpretive planning process, the researcher borrowed key components from existing interpretive and communications planning models, and reworked them where necessary to accommodate stakeholder participation. From this, a loose and tentative planning framework was created, which was then allowed to evolve, change and solidify with input and direction from participating stakeholders, as per an action research approach. The methods used to engage stakeholders and reflect on the study results also evolved as the project progressed. This chapter provides a rationale for the study methodology and presents a retrospective outline of the data collection methods and study design used in the project.

3.2 Rationale

3.2.1 Paradigm

This study operates from both positivist and interpretivist philosophies. Positivists typically assume that reality is objectively given, and can be described, studied and understood. Positivist studies generally attempt to test theory in an attempt to increase the predictive understanding of phenomena. For this study, a participatory approach to an interpretive planning exercise is tested to determine whether general outcomes commonly reported in the participatory literature emerge. These include stakeholder compliance and support, wider knowledge base for decision-making, improved legitimacy and local relevancy of decisions made, and, in the case of the negative: co-option, manipulation and stalemate.

However, the study is also approached to a smaller extent from an interpretivist paradigm. Interpretivists describe how phenomena are experienced by the people involved with them. An interpretive researcher assumes that there are multiple realities and wants to understand phenomena through the meanings that others assign to them. Interpretive studies do not predefine dependent and independent variables, but focus instead on the complexity of human meanings as situations emerge (Kaplan and Maxwell 1994). In this case, the phenomena that emerge from a participatory interpretive planning process are described from the perspectives of participants involved in the planning processes.

3.2.2 Methodology

3.2.2.1 Qualitative Approach

Qualitative research methods seek to “describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world...qualitative methods represent a mixture of the rational, serendipitous, and intuitive in which the personal experiences of the organisational researcher are often key events to be understood and analysed as data” (Van Maanen, 1983, p.9). Qualitative methods make use of language to understand people and their social and cultural contexts (Myers 1997); types of qualitative data include interviews, documents, and participant observation data.

A qualitative research methodology was adopted for this study because its aim was to achieve an in-depth understanding of a social process within the context of a real-life situation, and from the perspective of people involved in the process. As such, the research questions posed by this study can only be answered using a qualitative approach. Qualitative research methods can be used to help understand people and their social and cultural contexts, which are largely lost when data are quantified (Kaplan and Maxwell, 1994). Such methods are also particularly useful in real-life, or “natural” settings (e.g. Lincoln & Guba 1985), such as the one in which this investigation is set. In addition, qualitative investigations are often free from predetermined questions and theories, a useful characteristic for this case, which aims to describe outcomes emerging from a particular situation which has been largely uninvestigated in the fields of interpretive planning and environmental management.

3.2.2.2 Action Research

Action research is a qualitative social research approach which has the dual objectives of action and research: action to stimulate change in a community or organisation, and research to increase understanding of the system under study (Dick 1993). In particular, it examines “how human beings design and implement action in relation to one another” (Allen 2001, p.3). Action research is a science of *practice* with an emphasis on practical problems: it provides a flexible framework for formalising the natural learning process by building on experience (Allen 2001), and applying that learning to catalyse change (Dick 1993). Because of this action research is well suited for practitioners who wish to incorporate research into their day-to-day work with communities or organisations (Dick 1993). Action research also tends to be conducted in collaboration with non-researcher participants (Small 1995), i.e. it is participatory. Zuber-Skerritt's (1992, p.15) CRASP definition of action research summarises action research as: “**Critical** collaborative enquiry by **Reflective** practitioners, who are **Accountable** in making the results of their enquiry public, **Self-evaluative** of their practice, and engaged in **Participative** problem solving and continuing professional development.”

Although it does not have any prescribed methodology, according to Zuber-Skerritt (1991) action research is characterised as having four major phases: plan, act, observe and reflect, with the reflection stage searching for both confirming and disconfirming evidence. These phases typically follow at least one iterative (or spiral) cycle, as illustrated in Figure 4.1. With each cycle, understanding of the system under investigation is refined (Dick 1993). A unique aspect of action research is that the research questions, study design, and methods typically change as new knowledge and understanding emerge

through reflection (Small 1995). As such, action researchers must be “methodologically eclectic” (Small 1995, p.943).

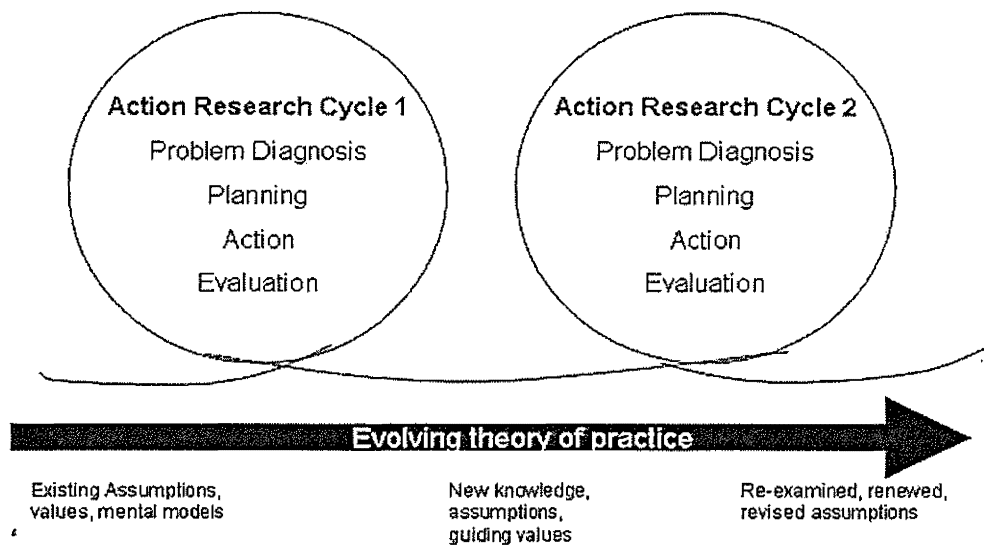


Figure 3.1. Action research cycles (adapted from Damme 1998 cited in Allen 2001).

Because it is flexible and reflexive, action research is useful for investigating problems in complex social systems. Quantitative science has difficulty describing such systems because of they have ‘soft’ boundaries and multiple indiscrete variables. Swepsom (1995) effectively summarises this difference between scientific method and action research as follows:

Scientific method makes the value choice to pursue generalisable knowledge rather than situation specific knowledge, i.e. to pursue external validity at the expense, if necessary, of internal validity. Therefore, it chooses problems where it is possible to extract meaningful relationships between discrete variables...

...Action research makes the value choice of pursuing situation specific knowledge rather than generalisable knowledge, i.e. it will trade off external validity for internal validity, if necessary. Therefore, it is generally applied to complex, social situations which are a complex set of relationships between indiscrete variables and it is not possible to choose which variables are crucial.

Another feature of action research is that, contrary to the case in quantitative studies, action researchers do not strive to be objective, value neutral observers, separated from the community under observation by their ‘expert’ status (Susman & Evered 1978). In action research studies the relationship between the researcher and the community (i.e. stakeholders) is critical, with the researcher taking on an interventionist role as an active, invested participant working to change how people perceive and operate in their worlds (Cooperrider & Srivastva 1987). Action researchers choose to solve problems that

contribute to general knowledge and also bring about positive social change (e.g. healthy communities, environmentally sound management, etc.) (Allen 2001).

Action research often has an agenda of empowerment and emancipation. Unlike positivist science which aims for prediction through induction and deduction, action research emphasises possibility and learning² (Susman and Evered 1978). Action research is intended to benefit the community or organisation under study; thus the knowledge and understanding it generates are made accessible to those being studied as well as to the scientific/research community. Using an appreciative mode of inquiry in action research can result in evolution of the normative vision and will of the group, organization, or society under investigation (Cooperrider & Srivastva 1987) and "...contribute to people realising their values—envisaging a preferred future and organizing effectively to achieve it" (Elden & Chisholm 1993 cited in Allen 2001, p.127). It is a research approach designed to foster innovation in social and organisational systems (Cooperrider & Srivastva 1987). In other words, it is generative.

These points and others which contrast the differences between mainstream science and action research are outlined in Table 3.1.

Table 3.1: Comparisons of positivist (mainstream) science and action research (source: Susman & Evered 1978).

Points of comparison	Positivist science	Action research
Value position	Methods are value neutral	Methods develop social systems and release human potential
Time perspective	Observation of the present	Observation of the present plus interpretation of the present from knowledge of the past, conceptualisation of more desirable futures
Relationship with units	Detached spectator, client system members are objects to study	Client system members are self-reflective subjects with whom to collaborate
Treatment of units studied	Cases are of interest only as representatives of populations	Cases can be sufficient sources of knowledge
Language for describing units	Denotative, observational	Connotative, metaphorical
Basis for assuming existence of units	Exist independently of humans	Human artefacts for human purposes
Epistemological aims	Induction and deduction	Conjecturing, creating settings for learning and modelling of behaviour
Criteria for confirmation	Logical consistency, prediction and control	Evaluating whether actions produce intended consequences
Basis for generalization	Broad, universal and free of context	Narrow situational and bound by context

Although authors continue to debate whether or not action research is a science (e.g. Susman & Evered 1978, Checkland 1981, Argyris *et al.* 1985), the action research paradigm has been accepted as a valid research method in applied fields such as organisational development, international development and education. Its application is also growing in

² Contemporary positivist science has, however, moved forward in recent decades, as indicated by initiatives such as the Millennium Project (see: www.millenniumassessment.org). This project synthesises scientific information with knowledge held by the private sector, practitioners, local communities and indigenous peoples to predict the effects of ecological change on human well-being, and to assist policy-makers in global, regional and local decision-making.

the fields of community development, environmental management, and information systems.

The primary aim of this study was to examine the types of outcomes generated by a communications and interpretive planning approach that incorporates stakeholder inclusion models, participatory research methods, and ecosystem health principles, and the implications of these outcomes in relation to interpretive planning and environmental management. Action research was selected as the research paradigm for this study for a number of reasons. Firstly, it is a flexible approach that lends itself to achieving *action* in work or community situations. In this case, the researcher was able to use action research as an opportunity to incorporate critical evaluation into her regular employment, which specifically involved developing a communications and interpretation plan for the SBWHA in consultation with stakeholders.

Secondly, action research is participatory. This is consistent with the policy commitment the client for this project (CALM) has made to increasing public participation, and to the terms of the researcher's contract with CALM, which dictated that interpretive planning be carried out in consultation with the local community. In addition, a participatory approach to interpretive planning in the SBWHA is a clear way to answer the ethical questions raised by Leader-Elliott (2003) and Staiff and Bushell (2002) with respect to who determines what is to be interpreted and whose voices should be heard. These questions are particularly relevant to interpretive planning in the SBWHA, where there are multiple stakeholders (including minority groups), multiple tenures, and ongoing issues over World Heritage listing and associated resource control. Participation is also acknowledged as an agent for increasing stakeholder support for strategy implementation, an essential quality given the usual lack of community support for CALM projects in Shark Bay.

Thirdly, action research is generative and change oriented, and therefore suited to stimulating social innovation. A major aim of this project was to stimulate those who live, work, or otherwise have a stake in Shark Bay to collaboratively develop a mutual vision for presenting Shark Bay to the rest of the world, and to use communications associated with the World Heritage Area to derive social, environmental, economic and corporate benefit.

Finally, because action research pursues situation-specific knowledge, it can be applied to complex social situations. This is essential given the complexity and volatility of issues associated with World Heritage listing in Shark Bay, and the wide range of stakeholder interests and land tenures that needed to be addressed in communications and interpretive planning for the area. Thus, action research was useful as a convergent approach for bringing together diverse perspectives and biological, social and economic knowledge into a common values platform.

3.2.2.3 Delphi Technique

The participatory process has the potential to be perilous. Johnson and Campbell (1999, p.2), in their study on public participation in landscape planning in the USA's Pacific Northwest, note that participatory processes are fraught with "deep contention, disparate values, and dangers of co-option, power plays, manipulation, and stalemate— the constant challenges faced in any attempt at pluralistic democracy."

Clearly, the more deeply divided and politically polarised the stakeholders, the more difficult it will be to achieve some level of consensus in the participatory planning process. One of the problems of soliciting opinions from people in the face-to-face group meetings that are often used in participatory process, is that some people tend to dominate discussion and others are often reluctant to voice their opinion at all. In practice, what may seem to emerge as a group consensus may be merely the views of one or more people--often those with dominant personalities--who have more strongly voiced their case, rather than a genuine reflection of what the group as a whole believe.

Thus the notion of 'procedural justice' (Thibaut & Walker 1975) is an important consideration when engaging stakeholders. People involved in decision-making are not only concerned with the outcomes of decision-making processes, but also with the fairness of those processes (Folger & Konovsky 1989; McFarlin & Sweeney 1992), in terms of having a voice, being listened to, and having influence over final outcomes (Eden and Ackerman, 1998). The benefits of employing procedural justice are demonstrated by studies which show that people have greater emotional commitment to decisions when they perceive the processes used to arrive at those decisions to be fair (Korsgaard *et al.* 1995). In cases where dominant personalities may skew participatory outcomes, the decision-making process can be designed to be fairer by reducing the role social-skills play in carving out opportunities to contribute, and by having anonymous contributions, so that the value of contributions is not linked to the positions or perceived alignments of those who proposed them (Eden & Ackerman 1998).

In the case of this study, the participatory process had to be designed to overcome the interpersonal dynamics between a deeply divided and politically polarised group of stakeholders, while at the same time identifying common values, tapping into collectively held expertise and information, and fostering cross-sectorial understanding. For these reasons, the Delphi technique was adopted as a data collection method for this study.

The Delphi technique is a group consensus method devised to overcome the 'halo' or 'bandwagon' effect resulting from group dynamics. The method was originally developed to identify goals, reveal group values, and establish priority on the basis of pooled judgement (Dalkey 1969, Delbecq 1975, Helmer 1966, Moore 1987). Participants are asked to respond to questions and instructions without coming into face-to-face contact with each other. Panel participants are not identified to each other during the course of the study, and comments of the panellists are always included anonymously in each stage of the inquiry. Such process eliminates all interpersonal dynamics that tend to exist in face-to-face group decision making and allows respondents to change their mind or put forward challenging views. The system does not mean everyone has to agree -- it merely locates the majority as indicated by the median.

Because the Delphi technique reveals areas of both agreement and disagreement, it is well-suited for this study. The technique can identify aspirations and objectives commonly held by a diverse group of stakeholders, in addition to outlying opinions and areas of potential conflict which must be addressed by the planning process.

There are disadvantages to using a Delphi technique, as outlined by Scriven (1991):

- Delphi questions are often designed in a way that over-constricts input of participants, particularly the first questionnaire;
- The intellect of the organiser must be equal to that of the participants if the best suggestions are to be recognised as such;
- Checks on censorship and the validity of synopses must be arranged; and
- The process is slow and expensive (Scriven, 1991).

With respect to this study, the first disadvantage identified by Scriven (1991) was overcome by using in-depth interviews instead of a mail-out questionnaire (the method most commonly used in Delphi studies) to collect the first round of information from participants. With regard to the third point, person triangulation and member checking were built into the data collection process.

3.2.3 Data collection methods

3.2.3.1 In-depth Interviews

A major aim of this project was to develop relationships and understanding between diverse stakeholders in the course of the planning process. This requires the face-to-face contact and deep insights that the interview method of data collection affords. Interviews were preferred over group data collection processes for parts of this study, as it was believed that group methods would reflect the views of dominant personalities in the Shark Bay community, rather than what the community as a whole believes.

The interview was selected as a data collection method because it assumes that the perspectives of others are meaningful and knowable. Interviews can be used to find out what is in and on other people's minds, in other words, to access the perspectives of those interviewed and to discover phenomena that cannot be directly observed (Patton 1990). In-depth interviews also encourage capturing of respondents' perceptions in their own words, allowing the evaluator to present the meaningfulness of the experience from the respondent's perspective (Mahoney 1997).

While interviews are commonly conducted using a tape recorder, a less resource-intensive approach is to take detailed notes during the interview and draw on memory to expand and clarify the notes immediately after the interview (Mahoney 1997). Where more complex questions are involved, effective note-taking can be achieved, but only after much practice. Further, the interviewer must frequently talk and write at the same time, a skill that is hard for some to achieve. However, according to Mahoney (1997), this note-taking approach is useful if time is short, the results are needed quickly, and the evaluation questions are simple. In addition, the absence of a tape recorder creates a more informal atmosphere enabling interviewees to speak more freely, and permits the interview to be conducted more easily in real-life situations such as pubs and boats. As these are the conditions that applied to this study, this was the data collection approach used. The disadvantages of such an approach were partially overcome by building member checks into the data collection process, to ensure that the views of informants were adequately represented. Member checks were conducted by giving interviewees copies of their draft interview transcripts to verify the accuracy of the content, and to make any changes or deletions they desired prior to the researcher incorporating their interview results into public documents.

Interviews were also conducted in accordance with Edith Cowan University's ethics guidelines: participants were notified verbally and in writing that they were free to change or withdraw their submissions altogether, and steps were taken to ensure the interview results remained confidential.

3.2.3.2 Key Informants

Mahoney (1997) describes key informants as persons or a group of persons who have unique skills or knowledge relevant to the intervention being evaluated, or who otherwise have information of interest to the researcher. They can be consulted individually, or pulled together into advisory committees which can be called to represent the ideas and attitudes of a community, group, or organization (Mahoney 1997). Mahoney (1997) sums up the use of key informants for data collection:

Key informants can help the evaluation team better understand the issue being evaluated, as well as the project participants, their backgrounds, behaviours, and attitudes, and any language or ethnic considerations. They can offer expertise beyond the evaluation team.

In addition, Mahoney (1997) notes that key informants can provide advice and feedback that increases credibility of study, serve as pipelines to pivotal groups, and help solidify relationships between evaluators, clients, participants, and other stakeholders. Two major aims of this study were to tap into the collective knowledge held by those who live, work and have research interests in Shark Bay, and to develop understanding and relationships between major stakeholders and environmental management agencies. The key informant approach is designed to achieve these results, and as such was selected as a data collection method for this study.

3.3 Design

The project structure was loosely based on a series of steps commonly used to develop communications and interpretive plans (see **Appendix 1** for more details on this structure and how it was developed). These steps are summarised as follows:

Firstly, devise a communications strategy that:

1. identifies issues and defines target audiences, and
2. establishes communications objectives, key messages and evaluation methods.

Secondly, devise a detailed interpretive action plan that:

1. meets communications objectives and conveys key messages defined in the communications strategy,
2. identifies specific themes and stories for interpretation,
3. identifies media and specific target audiences for interpreting stories and themes, and assesses existing interpretation, and
4. outlines roles, responsibilities, priorities, costs, and a timetable for implementation.

Two major action research cycles were applied to this structure: the first to engage the stakeholders in developing a communications strategy for the SBWHA, and the second to

engage stakeholders in developing an interpretive plan for the SBWHA. These two iterative cycles and the study participants are described below.

3.3.1 Participants

The community— as defined by this study— consists of those who live, work or have natural resource management or research interests in Shark Bay. Thus ‘community’ in this sense is not strictly geographically defined, and includes both locally and extra-locally based individuals and organisations. Throughout the following chapters, the community members defined above are referred to interchangeably as *stakeholders*³, *participants*, or simply *the community*. Community members who reside within the boundaries of the SBWHA are distinguished as the *local community*.

Eden and Ackerman (1998) discuss the importance of involving an organisation’s *internal* stakeholders in the strategy-making process. In the case of this study, the community, as circumscribed above, is equated to the ‘organisation’ undertaking the interpretive planning exercise, and its varied members as the organisation’s *internal stakeholders*. Visitors and the remainder of the outside world are relegated to the role of *target audience* for the plan

3.3.2 Action Research Cycles

This project comprised two primary action research cycles, each involving a series of three major phases: diagnosing the problem and planning a course of action, taking action, and reflecting on and evaluating the consequences of these actions. As detailed descriptions of the two action research cycles are presented in Chapter 4’s project chronology, the description below has been limited to a simple outline.

In the first stage (plan) of the first action research cycle, the need for a stakeholder-based communications plan was established, a preliminary list of stakeholders was generated, and a strategy was devised to initiate stakeholder engagement in the project. This was followed by actual engagement of stakeholder participants in face-to-face in-depth interviews, to identify their concerns and interests in relation to communications in the SBWHA (action). The interview results were analysed using a modified Delphi technique, whereby interview results were distributed among all participants, then distilled into a series of proposed objectives and key messages outlined in a questionnaire, giving participants the opportunity to modify and rank the proposed items (reflect). From this analysis, a series of communications objectives and key messages were agreed upon and presented in the form of a communications strategy for the SBWHA.

The first step (plan) of the second action research cycle involved acting on the communications strategy by identifying key informants to collaborate on a community-based interpretive action plan for the SBWHA. This was followed by a series of formal and informal meetings, interviews and workshops with key informants designed to: compile a series of stories and themes for interpreting in the SBWHA; select suitable media and locations for interpreting the compiled themes; and identify partners for leading and implementing interpretive projects (act). Finally, a group of representative stakeholders reflected on and evaluated the planning process and its products in a series of debriefing interviews at the end of the study (reflect). Theoretical analyses of these

³ A stakeholder is anyone who is affected by, or can influence, a decision or action (Dick 2000).

interview results and the overall planning outcomes were then conducted by the researcher.

3.3.3 Rigour

Project credibility was ensured by: the researcher's prolonged involvement in the area and the planning process under investigation; the researcher conducting multiple interviews, meetings and workshops with participants; and the researcher discussing the results with her study supervisors who provided outside perspectives.

Member checks were conducted by having participants comment on and approve all their draft interview and workshop results, and by giving participants the opportunity to review and comment on all draft documents and plans produced during the project. Person triangulation was achieved by collecting data from many different people. In all, more than 140 people participated in interviews, meetings and workshops conducted over the course of the study (approximately 3% of the total population living in or adjacent to the SBWHA). Theory triangulation was also achieved by applying different theories in the analysis of project outcomes.

Representativeness was achieved by ensuring that many different types of people were involved in the study, including (among many others): Aboriginal elders, scientists, hairdressers, commercial fishers, recreational fishers, religious leaders, receptionists, corporate directors, local government representatives, bureaucrats, pastoralists, accommodation owners, funding agencies, and tourism operators. Analytical representativeness was ensured by using strategies recommended by Ahern (1998): ensuring that all informants were included in the analysis; checking that examples used were from all the informants; and ensuring that the analysis included both typical and atypical data elements.

The fittingness of the data was established by comparing the outcomes of this study to that of outcomes from other participatory processes documented in the literature.

To ensure auditability of the study, field notes and original interview transcripts were kept during the analysis process.

Chapter 4

SBWHA COMMUNICATIONS PLANNING PROJECT: A CHRONOLOGY AND PRACTICAL REFLECTIONS

"There are men who would quickly love each other if once they were to speak to each other; for when they spoke they would discover that their souls had only separated by phantoms and delusions."

-Ernest Hello

4.1 Introduction

This chapter presents a detailed project chronology from the perspective of the researcher. In the first section, background information about World Heritage and the Shark Bay community is outlined. This is followed by the researcher's chronicle of the two action research cycles used by the study, and the various planning and action stages of each cycle. The chapter also includes *practical* reflections on the outcomes of both action research cycles, detailing what worked and what did not, as well as a final stakeholder evaluation of the project. Theoretical reflections on the project outcomes are excluded from this chapter, and are instead discussed in-depth in Chapter 5. This separation of practical and theoretical reflection was done to allow interpretive practitioners reviewing this thesis the opportunity to follow the method and process of the project in detail, without the clutter of theoretical musings. The difficulty the researcher had in finding detailed practical descriptions of participatory processes (particularly in relation to interpretive planning) to assist with designing this study provided the impetus for structuring this section as it is.

4.2 Background

The setting of this study is the west coast of Australia, in the SBWHA: a 22,000 km² area of land and sea, encompassing a variety of land tenures, settlements and resource uses (Figure 4.1). Approximately 70% of the study area is marine, of which 40% is vested in marine reserves. The remaining 30% of the study area is terrestrial, with 20% under pastoral lease, 6% in national parks and conservation reserves, and the remaining 4% consists of vacant crown land, other reserves and freehold. There are no Aboriginal reserves in the SBWHA. The towns of Denham, Carnarvon and Useless Loop (and the associated salt mining lease) are within the study area for this project, but excised from the SBWHA.

According to the Shark Bay World Heritage Area Official Website, "World Heritage areas are sites that have universal quality which transcends national values and belongs to peoples of the world to pass on to future generations."

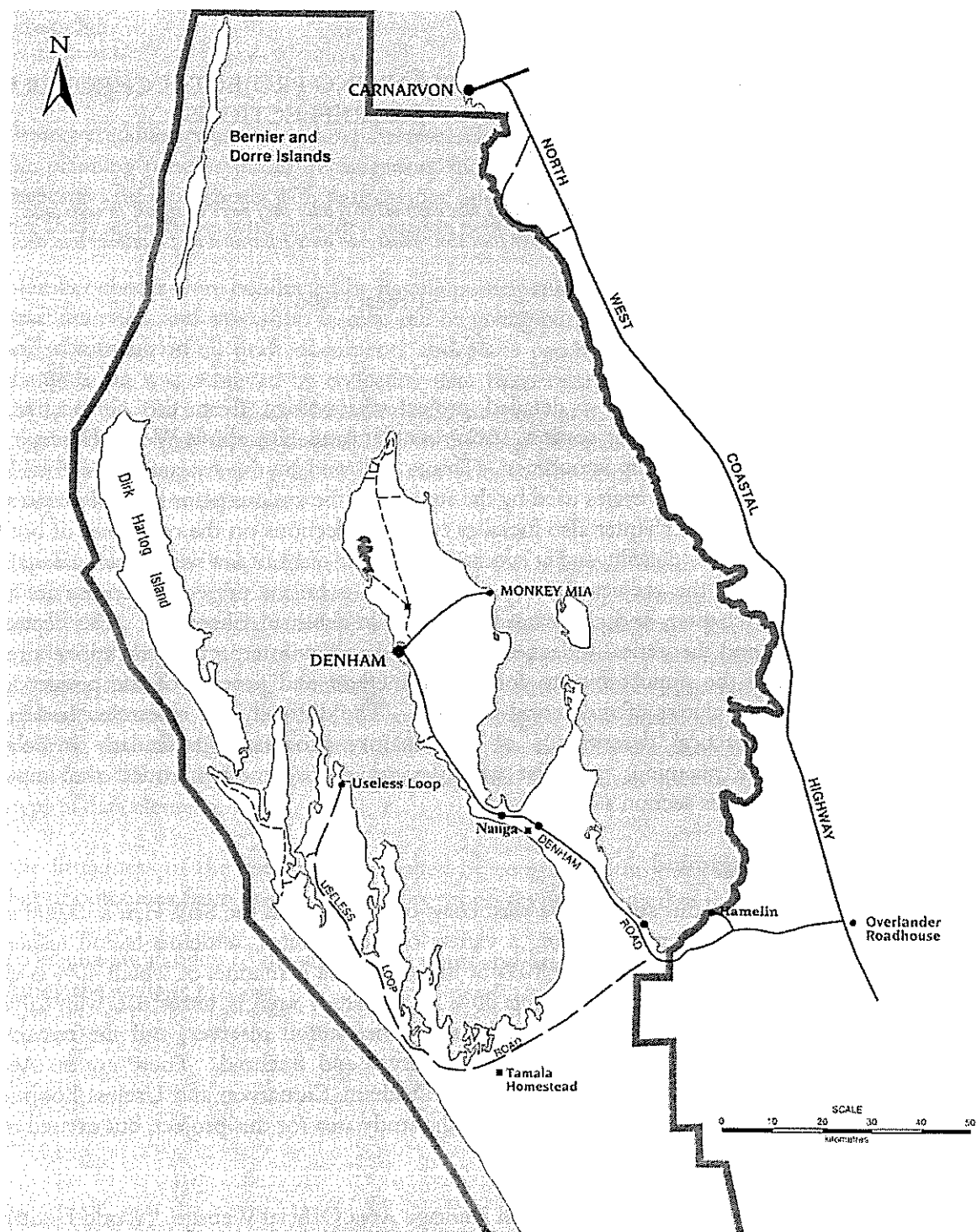


Figure 4.1. Shark Bay World Heritage Area.

4.2.1 Responsible Agencies and Planning Context

The following information was sourced from the Shark Bay World Heritage Area Official Website (n.d.).

Environment Australia's World Heritage Unit, with its headquarters in Canberra, is the administrative unit responsible for World Heritage sites. In 1997, the Western Australian and Commonwealth Governments signed an Agreement on administrative arrangements for the SBWHA, providing for protection and management of the site by the Western Australian Government in accordance with Australia's obligations under the World Heritage Convention. This agreement outlines the formation of SBWHA Ministerial Council to co-ordinate policy between Western Australia and the Commonwealth on matters regarding the World Heritage area.

Under the agreement, the lead agency for managing the SBWHA is CALM, which is responsible for day-to-day administration. In addition, a Community Consultative Committee (CCC) and Scientific Advisory Committee (SAC) both provide advice to the Ministerial Council and other agencies. These committees review issues which may affect the integrity of the area's World Heritage values, as well as issues relating to the protection, conservation, presentation and management of the SBWHA. **Figure 4.2** outlines the relationships between the responsible agencies.

Western Australian legislation which pertains to the SBWHA includes the Fisheries Act, Local Government Act, Land Act, Conservation and Land Management Act and the Environmental Protection Act. In addition, the area is subject to: the Shark Bay Regional Strategy, prepared in 1997 by the Western Australian Planning Commission; The Shark Bay Management Paper for Fish Resources, prepared by the Western Australian Fisheries Department in 1996; and detailed management plans prepared for conservation reserves in the area (The Shark Bay Marine Reserves Management Plan 1996-2006 and the Shark Bay Terrestrial Reserves Management Plan 2000-2009). Preparation of a strategic plan for the SBWHA was initiated by CALM in 1996, but has since stalled.

4.2.2 Community Profile

4.2.2.1 Shires of Shark Bay and Carnarvon

The SBWHA lies within the boundaries of two Shires: Shark Bay and Carnarvon. Approximately two-thirds of the study area lies within the Shire of Shark Bay. Population estimates for the Shire of Shark Bay range between approximately 1-2000 individuals (depending on the source), most of whom reside in Denham, the Shire's main settlement. Denham is above the 26th parallel, and located near the centre of SBWHA, 833 km from Perth, and 330 km from Carnarvon by road. From Perth, the town is about an eight hour drive or three hour flight. Additional settlements within the Shark Bay Shire include Monkey Mia, Nanga, Hamelin and Useless Loop. Useless Loop, a closed mining town, 250 km from Denham by road or 25 km by water, is excised from the SBWHA, as is Denham.

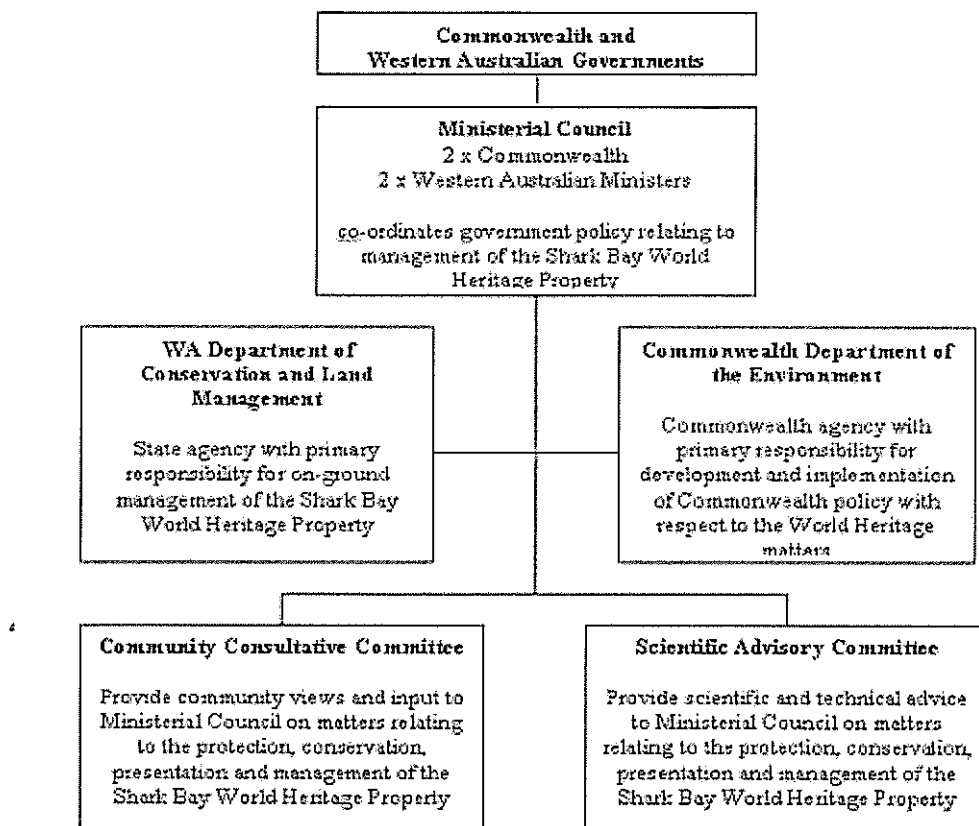


Figure 4.2. Responsible agencies for the SBWHA (source: Shark Bay World Heritage Area Official Website, n.d.)

Shark Bay's primary industry is tourism, which attracts between 120,000 and 180,000 visitors per year. Other major industries in the area include: nature conservation, commercial fishing, salt harvesting, pearl farming, shell mining and pastoralism (sheep, cattle and goats). Denham hosts a range of local businesses providing services and goods for the local community and tourists.

Approximately one-third of the study area lies within the Carnarvon Shire. Most of this area consists of sea, with the terrestrial component confined to two large islands and a long narrow strip of coastline along the eastern margin of the SBWHA. The Shire's population is 6,800, most of which is in Carnarvon, the largest settlement in the region and a major hub for services and facilities. Carnarvon is situated at the mouth of the Gascoyne River, just outside of the northern boundary of the SBWHA. Primary industries include fishing, particularly prawns and scallops, fruit and vegetable farming, and pastoralism. Carnarvon is 904km north of Perth, an eight hour trip by road or four hours by air.

4.2.2.2 *Ethnic Minorities*

According to Bowdler (2000) because economic activity in Shark Bay has been mostly restricted to fishing, pastoralism, gypsum mining, and pearling, the area has been subjected to relatively little post-European impact. Nonetheless, Shark Bay's Aboriginal

population was so severely disrupted by settlement in the nineteenth century that it almost vanished; today, although the Shark Bay community is predominantly composed of people of European origin there remain a number of Malgana descendants living in Denham (Bowdler 2000) and Carnarvon. Other Aboriginal people living or traditionally living in the area include the Inggarda, and Nhanda peoples. According the Australian Bureau of Statistics 2001 census, the Shark Bay Shire consisted of 1802 people, of which 115 were identified as Aboriginal or Torres Strait Islander. A significantly larger number of Aboriginal people live in Carnarvon, although many are from language groups whose traditional territories are outside of the SBWHA.

Many people in the area are of mixed Aboriginal-Malay (Malay referring to people of southeast Asian origin) descent. Other ethnic groups who have contributed to the Shark Bay milieu include Afghan, Indian, Chinese and Vietnamese. These Asian ethnic groups first arrived in Shark Bay with early white settlers, to take part in the pearling boom of the 1800s.

4.2.2.3 External Community Members

A number of 'external' stakeholders are included in the SBWHA community. Because of the area's globally unique natural features and abundant marine resources, there are a large number of external stakeholders, with long-term research and natural resource management interests in the area. These include scientists, conservationists and resource managers from government agencies, non-government organizations, museums, and universities. Also included are representatives from other government and development bodies located outside the SBWHA, visitors and tourists.

4.3 Project Conception

The genesis of the project was not an act of community will. Rather, CALM identified that a communications and interpretation plan was required for the SBWHA, and applied for Commonwealth funds earmarked for the SBWHA to hire a coordinator for the planning. As is protocol for World Heritage projects in Shark Bay, the application was reviewed and approved by both the Scientific Advisory Committee, and the Community Consultative Committee (CCC). Thus the CCC provided nominal community endorsement for the project (although the representativeness and functionality of this committee, particularly in terms of accountability and informing the wider community of its decisions, has been questioned).

An advertised competition was held for the position, and the researcher was hired by CALM in 2001 to serve a one year contract as World Heritage Community Education Coordinator for the Shark Bay World Heritage Area. The primary role of the position was to develop an interpretation and communications plan for the Shark Bay World Heritage area (SBWHA), to improve relations between stakeholders in the SBWHA, and to increase commitment to and understanding of World Heritage among stakeholders and visitors.

The bulk of project funding was provided by the Commonwealth, while the Department of Fisheries contributed about one fifth of the project costs. The contract was supervised by a small advisory team that included CALM's Shark Bay District Manager (based in Shark Bay), the regional leader for CALM's Parks and Visitor Services (based out of

Geraldton, 400 km to the south of Shark Bay), head of CALM's Interpretation Unit (based out of CALM headquarters in Perth), and the head of the Department of Fisheries' Communications Department (based out of Fisheries' headquarters in Perth).

The lack of community membership on the project advisory team demonstrates that this project did not start out using a participatory approach. The need for some level of participation, however, had been recognised at the outset, as the contract for the coordinator position dictated that planning be conducted in consultation with the local community.

CALM had also recognised that it was imperative for the project coordinator to be based in Shark Bay. In August 2001, the researcher moved to Denham and started her contract as World Heritage Community Education Coordinator.

4.3.1 The researcher's initial impressions

By living in the community, the researcher was quickly immersed in local politics. This shaped her initial opinion of the dynamics between the local community, CALM and other government agencies. This in turn determined how she chose to approach the project and engage stakeholders. The following summarises the researcher's initial impressions of the situation upon arriving in Shark Bay.

Prior to arriving in Shark Bay, the researcher had heard rumours about CALM having a poor reputation among Shark Bay residents: these were quickly confirmed. The researcher typically found townspeople friendly when first told she was a new resident, but this reaction was often followed by coldness or hostility when it was realized CALM was her employer. She was verbally berated on a few occasions, and subjected to the occasional diatribe about CALM's perceived incompetence, broken promises, lack of accountability to the local populace, and 'locking-up' of areas previously open to local public access. In contrast, the general impression the researcher had of many CALM employees was that they felt the locals were largely unconcerned about the damage uncontrolled access and other human activities were having on Shark Bay's natural environment.

The researcher also felt that she received a mixed reception from local CALM staff, her being both foreign (Canadian) and not fully familiar with Western Australia landscapes, and new to CALM and its policies and culture. Some staff did not understand her role, others appeared to harbour concerns that she would be 'stepping on toes', and some felt she was being overpaid.

Ambivalent relations between CALM and Department of Fisheries (the only other natural resource management agency based in Denham) added to these complications, as did strained relations between CALM and the local Shark Bay Shire, despite considerable headway the CALM District Manager had made in smoothing relations over the previous year. The researcher was also soon to discover that CALM had strong, established relations with many researchers from universities and institutions around Australia and the world, but that these were mostly with researchers working on marine mammals and threatened terrestrial mammals as part of CALM's endangered species recovery project. CALM's relationships with other research interests in the World Heritage Area were often not as strong, and in some cases there was little to no exchange or cross-awareness of

information and program activities. This problem was exacerbated by staff turn-over and a recent influx of new staff in the Denham office, which meant that corporate memory was sometimes lacking in the office, and that networks of contacts between CALM staff and other agencies and researchers were not always well established.

In addition, there was no management plan for the whole of the Shark Bay World Heritage Area, and although there were management plans for parks and reserves within the SBWHA boundary, these did little to outline communications objectives. A World Heritage nomination document was available, outlining the globally outstanding natural features of the area; however this consisted of an overview of these features, and was written in the jargon of scientists from an array of fields, including geology, microbiology, marine biology, botany, zoology, oceanography, conservation biology and geomorphology. A small CALM library was also available, consisting of books, historic accounts, reports, and scientific papers pertaining to Shark Bay.

In summary, these circumstances left the researcher in a situation where she was:

1. uncertain of the motivations of both her employers and the local community, and unsure whom, if any, were the 'good' or 'bad' guys;
2. regarded by the community as yet another CALM employee who, without an understanding of local concerns and conditions, would likely be telling them what they could and could not do.
3. viewed by some CALM staff as a potentially interfering outsider;
4. unaware of the strategic environmental management priorities and issues for the area;
5. confronted with a mass of printed information about Shark Bay, with limited indication as to what the most important features and stories were from scientific, historic and social points of view; and
6. without a network of contacts who were 'in the know' about Shark Bay.

Given these circumstances, the researcher surmised that a means of quickly establishing 'who and what' were really important in the SBWHA was required, as was the fostering of positive relationships with CALM staff, other government agencies, and general members of the community. In recognition of Allen's (2001) observation that environmental issues can only be effectively resolved by fostering commitment and understanding among those involved in the change process, and given the context of the proposed planning exercise, it was the researcher's belief that a conventional strategic planning cycle would be ineffective in this case.

4.3.2 Deciding on an Action Research Approach

As a scientist trained in the positivist tradition, the researcher had little knowledge of qualitative research approaches prior to undertaking this project. Her first exposure to the term 'action research', had been in the previous year, when she undertook a short contract to write a university research proposal which was to employ a participatory action research approach in relation to recovery of salinity-affected watersheds and their associated human communities. This proposal also introduced the researcher to the concept of ecosystem health, which is based on the notion that the health of ecosystems is implicitly linked to the health of the human communities who use and live in them. She also had discussions about the utility of action research approaches in relation to organisational change and stakeholder management with a friend who lectured in business management at a local university. Upon learning about the researcher's contract in Shark Bay, and the

volatile state of relations between CALM and the local community, he urged her to consider an action research approach and supplied some literature on the topic. He also suggested that the researcher consider using the project as a research topic for a Master's thesis.

On arriving in Shark Bay, and realising the complexity of issues affecting the project, the researcher decided an action research approach, in which she actively collaborated with the community (that being those who lived, worked or had research/managerial interest in the area) in developing a communications and interpretation plan for the World Heritage area, would be appropriate. In her initial thoughts, she anticipated that this approach would:

- increase community support and commitment to the implementation of the plan, once completed;
- help build bridges between CALM and the local community; and
- enable her to quickly tap into a pool of local, scientific, and managerial knowledge.

The researcher also decided to use the project as a topic for a Master's thesis in environmental management. She enrolled the following February, 2002.

However, having never before been associated with an action research project, and having only barely touched on the participatory action research literature, in the months that followed the researcher found the effects of this approach to be much more profound and far-reaching than she imagined; as a result she found herself considerably challenged, both professionally and personally. The researcher's views on conservation and environmental management were irrevocably changed, and her long-held notions in relation to the absolute role of positivist science in environmental management were shattered.

A flow chart illustrating the planning steps and products discussed in the following sections are outlined in Figure 4.3.

4.4 Action Research Cycle 1

The purpose of the first action research cycle was to develop new knowledge and guiding values to inform a communications strategy for the SBWHA, and to support the second research cycle. Specifically, the intent of this cycle was to:

- develop an idealised model for communications planning which would help inform strategic environmental management in the SBWHA;
- begin building relationships with stakeholders;
- engage stakeholders and elicit participation and support for ongoing communications planning processes where possible;
- to identify group values and develop stakeholder-derived communications objectives and key messages which address aspirations of the Shark Bay community, as well as environmental management requirements.
- develop a communications strategy for the SBWHA based on the above, to serve as a guide for future communications planning activity;
- identify 'knowledge and influence sinks'— key informants who hold knowledge and influence useful for future communications planning activities, i.e. who and what are important;

- flush out issues with potential to affect future planning activity, particularly in relation to communications and strategic environmental management; and
- evaluate the relative advantages and disadvantages of the process used to achieve the above.

This section details the plan, act and reflect stages of the first action research cycle.

4.4.1 *Diagnosis & Planning*

The diagnosis and planning stage of the first action research cycle involved four steps: the strategic evaluation of communications planning in the SBWHA against an idealised communications model, identification of a method for engaging stakeholders, stakeholder analysis, and defining an interview format (Figure 4.3).

4.4.1.1 *Strategic Evaluation*

A review of recent literature relating to communications and interpretation planning was conducted. Much of the literature on traditional interpretive planning in Australia and the USA and Canada focused on planning for place and did not appear to incorporate formal community involvement planning processes (Department of Interior National Park Service 2000, Knudson *et al.* 1999, Beck and Cable 1998, Veverka 1994, CALM 1988). These plans typically focused on a one way exchange of information with target audiences, and persuasive communication of agency mandates. In literature from the UK, however, there was greater recognition of the role of the community in developing interpretive plans (Carter 1997, Sussex Downs Conservation Board 1997). The ANZECC *Best Practice in Park Interpretation and Education* report (Earthlines Consortium 1999), in its review of interpretive practices in parks across Australia, also identified community involvement in defining interpretation goals as best practice in its interpretation planning model. The ANZECC model has a number of similarities to the 10-point communications programming model taught to marketing students at Edith Cowan University in Western Australia. The ECU model, however, is more elegant than the

ANZECC model, and focuses more strongly on basic communications principles. Elements from both of these two models were fused together, and then modified to include a participatory approach to stakeholder management; from this an idealised strategic model for a communications and interpretation program in the SBWHA was created (see Figure 1 in Appendix 1).

CALM had produced draft communication and interpretation plans for the SBHWA in 1998. These plans had been produced with input from a two-day community workshop, however, they had never been finalized and needed to be reviewed, revised and updated. These draft plans were compared to the idealised program model; particular attention was paid to the level of stakeholder consultation that had taken place, and to what degree management issues, community concerns, communications objectives, interpretive themes, and implementation prescriptions had been identified. From this comparison, a series of 'required action' points were drawn up and scheduled into a proposed work program for the project. This information is compiled in a report titled: *World Heritage Communications: Internal Review of Program Planning Status, September 30 2001* (Appendix 1).

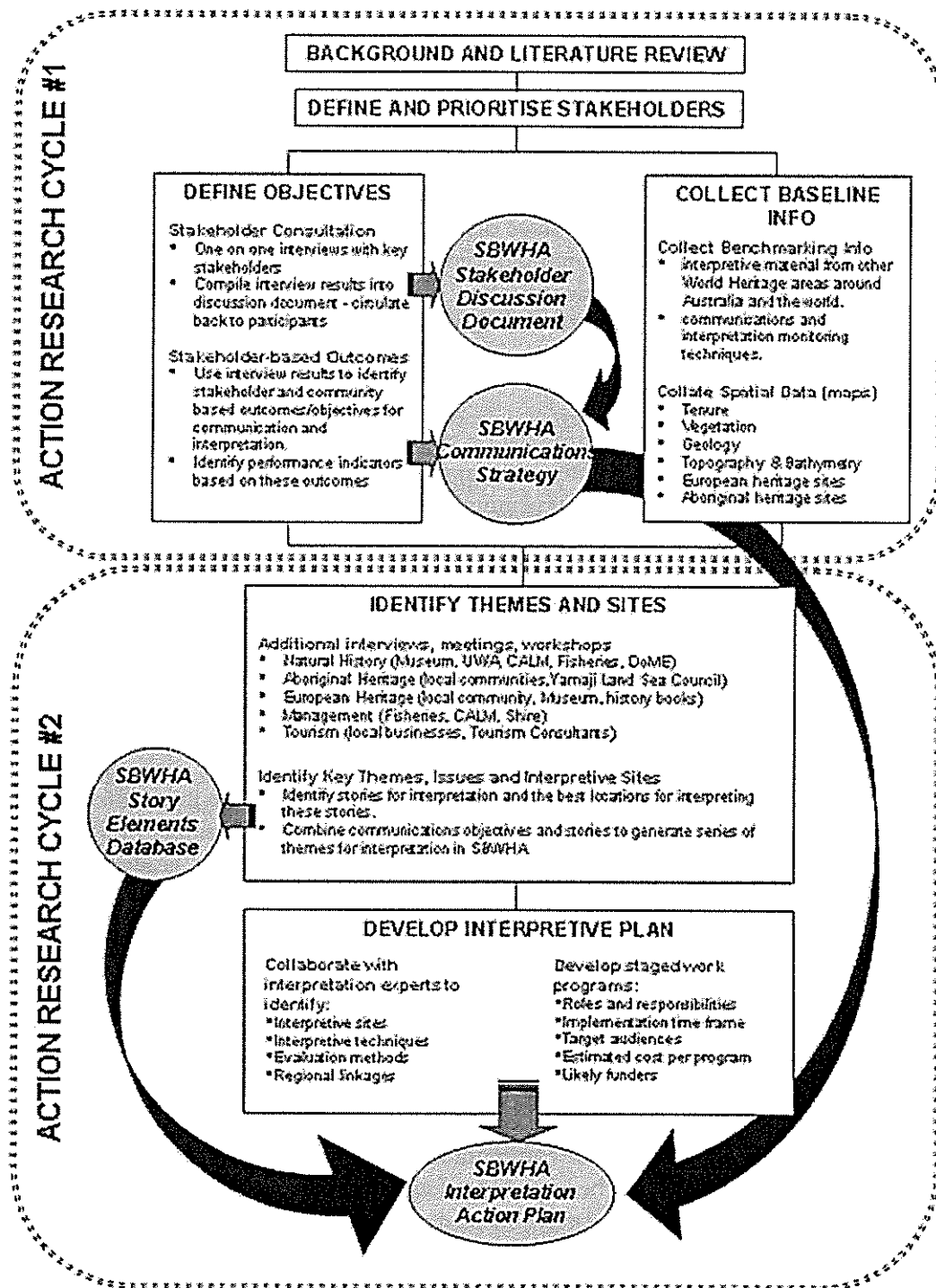


Figure 4.3. Outline of the two major action research cycles applied in the study.

Steps nine to eleven of the idealised model move beyond planning and into the realm of implementation and evaluation, and were therefore beyond the scope of this project.

The status report (Appendix I) also defined a vision for the project:

To develop communications for the Shark Bay World Heritage Area which meet conservation and environmental management objectives, as well as community aspirations (social and economic) for the area.

In addition, the report outlined a series of objectives for the proposed work program, which were to garner input and support from key stakeholders in the community, and to collaborate with stakeholders to:

- define and prioritise target audiences and stakeholders, with the issues, needs and wants of each segment specifically defined;
- establish specific objectives together with key performance indicators, key performance standards, and associated evaluation methodologies;
- establish agreed key messages to be transmitted to target audiences, and tied in with specific objectives;
- inventory and assess existing resources; identify required changes and additional resources; and
- produce a five-year Interpretation Action Plan organised into a strategic, prioritised and chronological program timetable, and outlining appropriate communication channels for transmitting key messages to specific target audiences, additional resources that are required (eg. materials, training, etc.), and clearly defined roles and responsibilities for all actively involved stakeholders.

4.4.1.2 Method for Engaging Stakeholders

In the case of developing a collaborative communications plan for the SBWHA, the participatory process needed to overcome the interpersonal dynamics between a deeply divided and politically polarised group of stakeholders, while at the same time identifying common ground, tapping into collectively held expertise and information, and fostering cross-sectorial understanding.

When discussing different methods for engaging the community, the project advisory team expressed concern about using public forums. In their experience, public meetings and workshops tended to be dominated by a few vocal people with strong viewpoints, and who typically opposed CALM and World Heritage involvement in Shark Bay. These events often turned into CALM-bashing episodes, and were considered by team members to be unworkable in terms of getting meaningful and representative community input.

Consequently, it was decided that despite the time commitment involved, community members and other stakeholders would have to be spoken to individually or in small groups, thereby circumventing the usual group dynamics, and allowing people to speak their minds freely. As the interviewer, the researcher was to remain as neutral as possible and treat every stakeholder comment as relevant, anonymous and confidential.

4.4.1.3 Strategic Stakeholder Analysis

The next stage of the project involved a preliminary strategic analysis to identify and prioritise key stakeholders and their levels of influence.

The researcher met with a small group of government agency representatives involved in the management of the SBWHA (including advisory team members). Together, the group developed and prioritised a preliminary list of stakeholders representing the groups and individuals that live, work, or have research and/or management interests in the Shark Bay World Heritage area. The group determined that stakeholders would, at a minimum, represent the following groups:

- commercial fishers
- recreational fishers
- aquaculturalists
- aboriginal communities
- Tourist Association (tourism operators)
- local Shires
- Rotary Club
- Chamber of Commerce
- local mining interests
- local salt harvesting interests
- pastoralists
- non-affiliated members of local community
- local historians
- Gascoyne Development Commission
- Western Australia Department of Conservation and Land Management
- Western Australia Department of Fisheries
- Museum of Western Australia
- researchers/scientists
- non-government environmental organisations
- World Heritage Scientific Advisory Committee
- World Heritage Community Consultative Committee

The list of stakeholders was charted, and each assigned a priority on a scale of one to three. Each stakeholder's perceived attitudes towards the World Heritage Area and its management (if known) were also recorded.

The group then planned strategies for involving each of the stakeholders. It was agreed that the researcher would: contact and privately interview those stakeholders assigned the highest priority; preferentially interview those with medium priority, with alternative contact by letter or email if time and distance constraints rendered an interview impractical; and opportunistically contact stakeholders with low priority via mail or email. The order in which certain individuals ought to be interviewed was also determined on a strategic basis.

It was also agreed that this preliminary list stakeholders be allowed to “snowball” by adding other individuals as recommended by the stakeholders during their interviews.

4.4.1.4 Interview Format

A loosely structured interview format was selected, based around six questions identified by the Scottish Tourism and Environment Initiative’s interpretive planning handbook, *A Sense of Place* (Carter 1997), as being relevant to establishing overall aims for interpretation:

- Are there any aspects of people's understanding or appreciation of SBWHA you would like improved? If so, what are they?
- Are there specific messages about conservation or the work of your organisation that you would like to get across? If so, what are they?
- Are there places in the SBWHA where you want to encourage or discourage access?
- Do you want to influence people's behaviour in any way? (eg. where they go, what they do, how long they stay...). Please discuss.
- Do you have economic or social interests that you want to address through providing communications or interpretation?
- Are there other issues that you feel interpretation/communications can address?

4.4.2 Action

The action component of the first action research cycle involved: conducting interviews with stakeholders, collation and dissemination of interview results, building consensus on communications objectives and messages, and incorporating this information into a communications strategy for the SBWHA (Figure 4.3).

4.4.2.1 Conducting Interviews

Interviews took place between October 2001 and February 2002. Formal contact was initiated with some stakeholders, with a request to interview outlined in a letter. Most stakeholders, however, were informally invited to interview either by phone call or personal contact, at which time an interview time and place convenient to the stakeholder was set. Living in the Shark Bay community was advantageous for the researcher, as she was frequently able to ask people to interview during informal conversation in social settings. Word spread about the interviews, and as a result people were unsurprised and sometimes eager when asked to participate.

In order to encourage stakeholders to interview, absolute flexibility was maintained with interview times and locations. Interview locations ranged from cafes and conference rooms, to fishing boats and 4WD excursions; interview times ranged from 7:00 am to 11:00 pm. The researcher also travelled to various locations to conduct interviews, including Perth, Carnarvon, Useless Loop and Dirk Hartog Island. In all, 115 people were interviewed in face-to-face meetings, either as individuals or in small groups of up to four people. Of those interviewed, approximately three quarters were Shark Bay residents. The group interviews always incorporated individuals representing a single organization or interest. In addition, the Carnarvon Rotary Club invited its own members, and members of local community groups to an evening presentation outlining some of the Shark Bay’s World Heritage features and the nature of the project. Attendees

were given questionnaires to fill out, which once completed were mailed to the researcher at a later date.

Except in cases where the interviewee and researcher were well acquainted, at the start of each interview, the researcher initiated casual conversation unrelated to the project to help establish rapport. This was followed by an explanation of the project and its objectives (that being to gather stakeholder input on communications objectives and key messages for the SBWHA). Interviewees were also informed of the voluntary nature of the interview and how their input would be handled. Specifically, the interviewees were told that their responses to six open-ended questions would be recorded and anonymously incorporated into a discussion document with the responses of all the other interviewees, and that this document would be circulated to all the interview participants and be made publicly available. Each interviewee was also told that they would be given a copy of the interview transcripts to modify however they saw fit. Once these conditions were established, the researcher engaged the interviewees in a discussion loosely structured around the six questions outlined above.

Because the budget did not accommodate the costs of tape recording and transcribing interviews, the researcher recorded a summary and key points of the interviewees' responses using pen and paper. At frequent points in the interview noted points were confirmed with the interviewee to make sure his or her meaning had been adequately captured. The overall intent of the interviews was to capture a diversity of responses and opinions, so probing questions were asked if it was believed that the interviewee held views that would increase the diversity of responses so far accumulated. If the interviewee began to digress onto unrelated topics, the researcher attempted to steer the conversation back to the six questions.

The interview format was kept open-ended and very loose so that other issues of importance to stakeholders and relevant to strategic environmental management in the World Heritage Area could also be raised during the interview. These issues were also recorded.

After the interview, the interview notes were compiled into a series of dot points organised as appropriate under the six questions. These were typed up as a completed questionnaire (see examples in **Appendix 2**), which was either hand delivered, faxed, mailed or emailed to the interviewee. Each interviewee was asked in writing to review their responses recorded in the questionnaire, make *any* changes, additions or deletions they felt appropriate, and return the modified version to the researcher. They were also informed in writing that the responses in their reviewed and modified version of the questionnaire would be anonymously compiled into a discussion document along with the responses of all the other interviewees, and that this document would be circulated back to all interview participants and be made available for public review.

Low priority stakeholders were contacted mostly by email or letter, and sent an explanatory outline of the project, asking them to respond to the six questions in a questionnaire. This process yielded very few responses. In addition a project explanation and questionnaire were published in the local community newspaper, with a broadcast request for community input. Despite the newspaper's wide readership, this broadcast did

not illicit a single response; however, it presented most of the local Shark Bay community with the *opportunity* to contribute if they wished.

4.4.2.2 Data Collation and Stakeholder Reflection

The next phase of the project required compilation and feedback of the data gathered from the stakeholder interviews and transformation of this information into a series of communications objectives and messages for the SBWHA. This was done using an iterative process loosely based on the principles of the Delphi technique, as defined by Delbecq, *et al.* (1975), and as outlined in Section 3.3 of Chapter 3.

For this study, the interviews constituted the first Delphi 'questionnaire'. The researcher compiled the reviewed and modified dot point responses verbatim (without attempting to collate or summarise) from the reviewed interview questionnaires, and organised them under major headings represented by each of the six questions. Each of the dot point responses were then grouped into subheadings as per the Delphi technique (Delbecq, *et al.*, 1975). Organised as such, all interview responses were anonymously compiled in a *stakeholder discussion document* (Appendix 3), developed specifically for feedback to those who participated in the interviews.

Next, the researcher combed through responses and their headings, looking for themes which could be translated into communications objectives and key messages for the SBWHA. In doing this, she looked for both responses which were expressed by many stakeholders, thereby indicating they represented values or opinions widely held by the community, and for responses which represented the views or aspirations of specific sectors of the Shark Bay community (eg. traditional fishers or Aboriginal groups).

Based on this analysis, a series of proposed primary objectives and supporting key messages were derived for communications in the Shark Bay World Heritage Area. These were outlined in a second Delphi questionnaire (Appendix 4), asking respondents to rank order each objective, and to provide comments on their agreement or disagreement with each objective and key message. Again, participants were fully informed of the voluntary and anonymous nature of their participation, and the intent of the questionnaire. This second questionnaire served as an iterative means to member check the credibility of the researcher's interpretation of the interview results.

The researcher's immediate supervisor in CALM reviewed the discussion document before the final version was printed, but made no changes on the premise that the document should not be censored. This document was then circulated to every one of the interview participants. The discussion document enabled the participants to see their views in context with the views and the ideas of other participants, without being influenced by interpersonal dynamics. Included with the circulated discussion document was the second questionnaire containing the proposed communications objectives and key messages distilled from the interview results. Again, an article was placed in the local community newspaper inviting all interested members of the community to peruse a copy of the discussion document and fill out the second questionnaire.

Within a few days of circulation, feedback from the discussion document began. The majority of responses received were positive. Interestingly, many people expressed surprise that their opinions were shared by so many others. Others were simply pleased

to see their comments acknowledged and printed. Although there were several critical comments directed at CALM, feedback from CALM staff indicated a general feeling that the document was important 'intelligence' for understanding the community and clarifying problem areas.

However, there was a major adverse reaction from a group of influential Shark Bay residents, triggered by some politically-charged comments in the discussion document which challenged the local power base. This reaction almost derailed the entire planning process; in particular, it affected the researcher's standing in the community, the relationships she had worked to establish, the level of community participation achieved in the following planning stages, and the credibility of the whole project. Details on how and why the reaction occurred and how it affected the project are outlined in the practical reflections documented in Section 4.3 of this chapter.

News of the furore also caught the concern and attention of CALM's corporate executive and government ministers. The researcher's locally and regionally-based superiors in CALM lent their support and did their best to calm the situation and keep the project on track. However, full public release of the discussion document was halted, and on the behest of the Shire of Shark Bay, a letter of 'clarification' was mailed to all 115 individuals who had received a copy of the document (Appendix 5).

It is suspected that the negative reaction also affected the response rate to the second questionnaire. Participants were given three weeks to respond to the questionnaire, but the response rate was low (approximately 30%). The researcher could have increased the response rate by making individual contact with interviewees and personally administering the questionnaire, but did not do so. This was due in part because of time constraints and her despondence over the political quagmire in which the project was now foundering, and in part because she was reasonably confident that the objectives and key messages outlined in the questionnaire were adequately representative of the community.

The results from the second questionnaire were posted on a website, and compiled in a brief report which was emailed or mailed to all the original interviewees (Appendix 6). There was no response to this report, except for an apology from an individual who had made some negative remarks in his questionnaire.

Given the lack of feedback, it was decided to end the Delphi rounds with the second questionnaire. The researcher then modified the objectives and key messages as per the comments received, and prioritised the objectives in order of their collective ranking. Tables 4.1 and 4.2 outline these results.

4.4.2.3 Communications Strategy

The next step involved incorporating the communications objectives and key messages identified in the previous process into a *communications strategy* for SBWHA. The purpose of this strategy was to transmit to planners and decision-makers the stakeholder values and aspirations in relation to communications in the SBWHA, and to serve as a guide for all communications and interpretation projects in the SBWHA over the next five years.

Table 4.1. Knowledge-based communications objectives and key messages identified and prioritised through stakeholder consultation.

Knowledge objectives and key messages: Improving people's understanding and appreciation of Shark Bay	
1. Increased awareness and appreciation of the reasons for Shark Bay's World Heritage listing	<ul style="list-style-type: none"> Shark Bay is World Heritage listed for four major reasons: seagrasses, hypersalinity, stromatolites and habitats for some of the world's most endangered species. There are 38 World Heritage values in Shark Bay.
2. Increased awareness and appreciation of the significance of World Heritage listing	<ul style="list-style-type: none"> Shark Bay is a globally outstanding natural area - one of the most important natural treasures the earth has to offer. Shark Bay is one of only 16 natural sites on earth that meet all four criteria for World Heritage listing. World Heritage listing means that Australia is obliged to protect World Heritage values in Shark Bay, but does not exclude human activity. World Heritage listing has affected the local community in both positive and negative ways.
3. Increased awareness and understanding of Shark Bay's natural environment	<ul style="list-style-type: none"> Shark Bay is a dynamic environment shaped by a complex variety of natural processes. Shark Bay is a fragile environment that needs special care, management and protection to keep it 'natural'. Everyone who lives in and visits Shark Bay can play a part in looking after and improving the environment. Shark Bay contains important habitats for many globally threatened species. There are many processes which threaten Australia's native plants and animals; in Shark Bay, we are working to reverse these processes and recover endangered species.
4. Increased awareness of what to expect from a visit to Shark Bay	<ul style="list-style-type: none"> There is much more to Shark Bay than just fishing and dolphins - there is a wide variety of natural and historic-based things to see and do. Shark Bay is an enormous and wild expanse of land and sea; its main towns and access points are Denham and Camarvon. Fees apply for camping, visiting parks and reserves, and for drinking water. Shark Bay is a wild and remote area, and medical assistance is not readily available; safety precautions, special equipment, and knowledge of local conditions are required when travelling off of major roads or by sea. Weather conditions in Shark Bay change throughout the year - there are different things to do in different weather conditions. Pets are not allowed in National Parks.
5. Increased awareness of and appreciation for Shark Bay's Aboriginal culture and history	<ul style="list-style-type: none"> Aboriginal people have a rich culture and have lived in Shark Bay for thousands of years. Shark Bay World Heritage area's traditional owners include the Malgana, Nanda and Inggarda people. Contemporary Aboriginal people in the Shark Bay World Heritage area make significant contributions to the local economy, businesses and conservation. Shark Bay beach seine fishing is a unique and sustainable form of commercial fishing developed and practiced by Malgana people.
6. Increased awareness of and appreciation for Shark Bay's maritime and post-settlement cultural history	<ul style="list-style-type: none"> Shark Bay is home to the first known European landing in Australia. Shark Bay has a fascinating history of early European exploration, guano trade, pearling, pastoralism, fishing and mining. Contemporary Shark Bay is a unique mix of Aboriginal, Malay, European and other cultures that arose from years of relative isolation from the rest of the world - Shark Bay is special because these cultures peacefully coexist.
7. Increased awareness of fish ecology and fishing impacts	<ul style="list-style-type: none"> Fishing affects fish stocks. We all need to fish responsibly. Fisheries management and regulations are in place to protect fish stocks for the future. Fish rely on habitats such as seagrass, mangroves and coral. These habitats must be looked after and protected so recreational and commercial fish stocks survive. Commercial fishing and pearling are part of Shark Bay's heritage and an important part of the local economy and culture.

Table 4.2. Behaviour-based communications objectives and key messages identified and prioritised through stakeholder consultation.

Behavioural objectives and key messages: Influencing people's behaviour in Shark Bay	
1. More responsible behaviour and improved community stewardship	<ul style="list-style-type: none"> Shark Bay is in your hands - help keep Shark Bay world class by taking nothing but photos and leaving nothing but footprints. Please leave flowers, plants, animals, shells, stones, fossils, and Aboriginal and historical artefacts where you found them, so they can be enjoyed by everybody. <p>On land</p> <ul style="list-style-type: none"> Shark Bay's loose sandy soils are easily eroded: stick to existing tracks (whether on foot or in a vehicle) and do not remove living or dead vegetation, or woody debris - all this helps keep soils where they belong - on the ground. No littering or burying rubbish - take it to the nearest tip. Fire puts us all at risk - only light fires when and where permitted, and under safe conditions. Otherwise, use a portable gas stove. Living and dead trees and shrubs are habitat for wildlife and help prevent erosion - no firewood collecting allowed! Toilet waste leaches quickly through sandy soils and contaminates Shark Bay's pristine waters - use facilities where available; otherwise bury properly, well away from the water's edge. Pets can kill and stress wild animals - if you can't leave your pets at home, keep them under control and clean up after them. Shark Bay is a remote and harsh environment - never travel off-road without plenty of water or safety and recovery gear. If you are not prepared, take a 4WD tour instead. Poor 4WD practice destroys tracks, damages the environment, puts your safety at risk, and increases risk of others getting bogged behind you - stick to existing tracks, deflate your tyres, engage 4WD, bring appropriate recovery gear and know how to use it. If on a beach, drive below the tide line. Shark Bay's beaches are among the most important turtle nesting sites in Australia - please do not drive or camp on turtle nesting beaches. Sand spits and sand bars are important roosting sites for migratory birds - many of these birds have flown thousands of kilometres and need to conserve their energy - please avoid disturbing them while walking or driving. Please respect pastoral operations - don't be responsible for hurting or killing stock by leaving gates open, or by interfering with bores, water lines, troughs or other pastoral property. <p>On water</p> <ul style="list-style-type: none"> Shark Bay is a remote area - special precautions and knowledge of local conditions are required when boating. Boating through shallow water stresses fish, damages sea grass beds, and risks collision with large marine animals - stick to channels and avoid or slow down over shallow waters. Recreational boaters frighten fish stocks targeted by commercial mesh net fishers - recreational boaters should maintain a 300+m courtesy distance between themselves and commercial vessels. Marine mammals can become frightened or stressed by approaching vessels - please maintain legal distances between your vessel and marine life. Help protect Shark Bay's marine environment by anchoring on sand, not on corals or seagrasses. Nesting turtles and hatchlings are confused by bright lights - avoid using bright lights around beaches at night between December and April. Litter, plastic bags, stray line and tackle kill marine life and pose a safety hazard by entangling in boat props, commercial nets and pots - store and dispose of your rubbish responsibly, and retrieve snapped line and tackle where possible. Fish for the future: fishing regulations are in place to protect fish stocks into the future - please take the time to learn the rules and obey them. Fish stocks in Shark Bay are limited - fish for a feed, not for the freezer. Marine park zoning is in place to protect important marine habitats in Shark Bay - please adhere to zoning regulations. Released fish can die if not brought in, handled and released properly - handle your catch carefully. Marine environments are very fragile - you can help protect them by not touching or removing corals, shellfish, sponges or other marine life. and mind your fins when diving or snorkelling. Dead shells on the beach are habitat for other animals - please leave them where you found them.
2. Increased community stewardship and support for the SBWHA	<ul style="list-style-type: none"> Shark Bay belongs to all of us. We can all work together to enjoy, learn about and look after this very special area.
3. Increased tourism at off-peak times	<ul style="list-style-type: none"> There are natural and cultural-based things to see and do year round in Shark Bay. Local tour operators provide quality experiences with local knowledge and character.
4. Reduced tourism impacts on the local community	<ul style="list-style-type: none"> Fishing, pearling, pastoralism and mining are important industries in Shark Bay - please respect the local community by appreciating but not interfering with these activities. Shark Bay is a small community (800 people!) that gets a lot of visitors (130,000 per year). Help us keep Shark Bay special by knowing and following regulations and guidelines.

In particular, the intent of the strategy was to inform the next stage of this study. In the document, general strategies for meeting communications objectives and transmitting key messages were identified, as were performance indicators for each of the stakeholder-derived objectives, and possible evaluation methods. The performance indicators were generated with input from representatives of relevant stakeholder groups. A copy of the strategy is in Appendix 7.

An article was printed in the local paper to announce the availability of a draft communications strategy for public review and comment (a counter copy was made available at the Denham CALM office). Copies were also sent to all project participants and other stakeholders by email. The project advisory team members made a number of recommendations for the strategy, and the Aboriginal working groups assigned two people to review the document and provide comment. No feedback was received from other stakeholders. This lack of response may have been in part due to the political situation, and also because the document was of a strategic nature that many lay people find difficult relating to.

4.4.3 Practical Reflections

The following is a practical reflection on this first action research cycle: a deconstruction of what worked and what went wrong.

4.4.3.1 Deciding on Stakeholders

The preliminary stakeholder list changed quite a bit as a result of the snowball effect, and with improved awareness of who was who in terms of influence and interest in the SBWHA. Inevitably, some people were missed or left out as a result of oversight, or because of time and distance constraints and this created some problems in later stages of the project.

In retrospect, the local Shire should have been formally involved in identifying the initial list of key stakeholders, both for political reasons, and also to better ensure no one of importance was missed. This reinforces the need to get one's primary stakeholders involved at the very beginning of the process. However, the researcher and her supervisors generally felt that by using the snowball strategy and allowing considerable time for the interviews (three months), the process was reasonably successful in identifying and engaging a broad and representative range of stakeholders.

4.4.3.2 The Interview Process

The interview process was revelatory. For the researcher, it was both emotionally draining and exhilarating. The interviews tapped into a melting pot of fear, anger, frustration, as well as knowledge, hope, creativity, and passion. Some people ground axes, using the space to express their discontent over certain issues. Others expressed fear about losing control of their community and a place they loved and grew up in. Many more seized the opportunity to express creative ideas and share their knowledge, history and enthusiasm for Shark Bay.

Ultimately the results were very revealing. In this politically divided, polarised community, there was an incredible amount of common ground. Strikingly, an overwhelming majority of the people interviewed demonstrated a large amount of passion and caring for the area.

This can be seen in the large number of comments in the discussion document (Appendix 3) related to environmental concerns and wanting others to know about and appreciate Shark Bay. A majority of the community members who responded to the second Delphi questionnaire placed a high priority on wanting people to look after and appreciate the SBWHA, and to know how special and fragile Shark Bay is. A long history of political posturing appears to have prevented this community from seeing what may be one of their most valuable assets: a common platform of values and aspirations.

As for the researcher, she emerged from the process with 115 voices in her head, and a wide-ranging view of the issues, opportunities and constraints associated with the SBWHA. As a result, the researcher was able to form a mind-map of who the stakeholders were, their specific areas of influence and knowledge, and their private politics and stances on issues; in other words, she had a very good idea of whom and what were important in the SBWHA. She also knew how to contact these people and where to get more information. Most importantly, however, the researcher had begun to build trust and relationships with people in the community by listening without judging, and acknowledging the legitimacy of their opinions.

The interview process also improved the researcher's political sensitivity, however, clearly not sufficiently so, given the landmine she was to step on in the next phase of the process.

4.4.3.3 Deconstructing the Negative Reaction

The reaction against the discussion document was a major setback for the project (fortunately this was resolved to a large extent in later stages of the project). The researcher was left feeling like a pariah, and was shunned by many who were previously friendly and supportive. Indeed, the researcher felt the reaction as both a personal and professional blow, and her faith in the participatory process and its ability to transcend to entrenched power bases was severely shaken. The personal crisis the researcher experienced as a result of this event is an example of the potential emotional perils associated with action research and immersing researchers into communities.

During the interviewing phase, most interviewees were cognisant that their comments would be made public, and in some cases retracted or asked that their critical comments about other members of the community not be recorded. However, one of the interviewees made a number of politically charged criticisms about the local Shire council. The interviewee, an influential person in the town, strongly demanded that these comments be incorporated into the discussion document. The comments were not directly related to the six questions that were the focus of the interviews, but neither were many others. A number of derogatory comments about CALM had also been made in other interviews.

The researcher worried over this dilemma, but two points decided the issue. Firstly, the researcher believed that constituents have the right to publicly express opinions about their governments, and as a result all government bodies, state and local government authorities, ought to be accustomed to frequent criticism and accept this as an occupational hazard. Secondly, the researcher felt it was fair to include these comments about the local council, given that criticisms levelled at other government agencies were included in the document. It was decided that the standard of the process should be upheld, and that no comments would be censored. The critical comments were placed in

the last chapter of the discussion document, along with others that were not directly related to the six interview questions. The researcher did not anticipate the inclusion would create any great problems⁴, but this was a naïve assumption. The release of the discussion document inadvertently triggered a major adverse reaction from some influential sectors of the Shark Bay community. Accusations brought against the project and researcher were as follows:

- the researcher had excluded critical comments made by others during the interview process; while retaining those that criticised that local council;
- the discussion document should have summarised the interviewees' comments; and that by presenting comments verbatim, the document was too long and repetitive, thereby ensuring that few would read the entire document;
- the document content was poorly worded and badly organised;
- key people were excluded from the interview process;
- the process was undemocratic because the comments were anonymous, and people who did not agree with comments made by others were therefore denied recourse and the right of challenge;
- many of the comments expressed a minority view without indicating that these opinions were not held by the majority of the community;
- the names of all those interviewed should have been supplied;
- representatives from the local council should have reviewed and revised the document before its release;
- the process was un-Australian and foreign; and
- the researcher lacked political sensitivity and finesse.

Certainly, the accusations held varying degrees of truth. With respect to the charge that the researcher had excluded comments, it is true that the researcher did not include some of the comments made during an interview with the person who made the charge. However, these comments were part of an informal conversation held prior to tackling the interview questions, and which the researcher is certain were understood by the interviewee as being apart from the formal interview and unrelated to the project. Certainly the interviewee would have noted that his comments in this regard were not recorded at the time. In addition he did not choose to add these comments when he saw that they were absent from the draft transcript of his interview. Nonetheless, his concerns have weight, because the offending comments made by the other interviewee were not directly related to the project either—it was just that in this case, the interviewee felt they were so, and insisted the comments be incorporated.

With respect to summarising the responses in the discussion document: it is true that failing to summarise the responses made for a long, often poorly worded document, however, it was believed that this would give an approximate indication as to how many held certain opinions, and that this was important. In addition, the document was hastily produced, and grammar and organisation etc. could have been improved. However, at the time, the researcher was feeling pressure from some quarters within CALM about the length of time spent on consultation, and her postponement of other duties (unrelated to this study but part of her contract with CALM) that needed urgent attention.

⁴ Another comment about a locally run business added fuel to the fire (or perhaps even ignited it)—the researcher was entirely unaware that this issue was the so-called 'Achilles heel' of the person who ignited the furore.

The accusation that important people were excluded from the interview process was also true. Inevitably, some individuals were missed. The exclusion of one person in particular was a serious oversight: an eminent and fiercely intellectual individual, with a keen knowledge, interest and history in Shark Bay, and strong connections with influential people in the community (i.e. clearly a *very* important stakeholder). Because the researcher was shaken by the uncomfortable nature of her initial meeting with this individual, she was unable to work up the courage to interview him. This was a mistake that was only partially amended by sincere efforts to engage this individual in later stages of the project.

As for criticisms about anonymity and comments representing the minority view; this was one of the primary intents of the discussion document: to allow people, including those representing minority or marginalised sections of the community the opportunity to speak their minds without fear of repercussion.

Allowing representatives of the local council to review the document before it was circulated would have prevented the furor, but doing so would have risked the censoring of legitimate opinions, and may possibly have prevented the release of the document altogether. Censorship would certainly have compromised the spirit of the project in the minds of some stakeholders. However, the local council is accustomed to having a degree of control over public statements from the community, as the local newspaper is published by the Shire. Even with hindsight, the researcher and her supervisors remain uncertain as to how this issue should have been handled.

With respect to comments regarding the project's un-Australian flavour, it is noted that publication of public submissions is a common step in planning processes used throughout Western Australia. With respect to criticisms about the researcher's lack of political sensitivity and finesse, these are clearly true, given that she did not foresee the negative reaction, and given she was unable to calm or regain the situation in the immediate aftermath. The researcher's inability to neutralise her counter-reaction of shock and anger only aggravated matters. In her defence, however, Shark Bay's political waters are notoriously difficult to navigate.

4.4.3.4 Finding Consensus with the Delphi Questionnaire

The prioritisation results from the second questionnaire, although disappointing in number, were nonetheless very interesting. In addition to the expected responses, there were also many surprises: individuals from the business community who ranked environmental concerns well ahead of business concerns, and members of the scientific/environmental sector who placed the social and economic concerns of the community in the highest ranking. This confirmed the presence of unacknowledged common ground and empathy between superficially competing sectors of the Shark Bay community.

4.4.3.5 Usefulness of Strategic Documents

The researcher was hesitant to produce a communications strategy, largely because she felt that these types of documents, while useful to bureaucrats for planning and accountability, are often meaningless to the lay person, and tend to have little on-the-ground purpose because they are too generalised and often forgotten soon after they are produced. It was

the researcher's preference that the stakeholder-defined objectives and key messages simply be incorporated as an introduction to a detailed interpretive plan produced at the end of the project. However, one member of the advisory team was adamant that a strategy document be produced before progressing any further. Although the community was, as suspected, mostly unreceptive to the strategy, preparing it turned out to be a useful exercise, because it forced better organisation of the project's next stage, and catalysed consideration and discussion about performance indicators and evaluation methods.

4.5 Action Research Cycle 2

The purpose of the second action research cycle was to:

- use knowledge and guiding values determined in cycle 1 to inform the next stage of planning activity— particularly stakeholder-derived communications objectives and key messages;
- engage key stakeholders (those with particular knowledge or influence, i.e. key informants) in developing a detailed interpretation plan for the SBWHA;
- establish informal advisory groups consisting of key informants, and work with these groups to identify specific story ideas, themes and channels for communication, work through areas of disagreement, and identify roles and responsibilities for eventual implementation of the plan;
- develop a collaborative interpretation action plan for the SBWHA which both supports strategic environmental management and addresses stakeholder needs and aspirations; and
- evaluate the process used to achieve the above.

This section details the plan, act and reflect stages of the second action research cycle.

4.5.1 *Diagnosis and Planning*

The diagnosis and planning stage of the second action research cycle involved three steps: assessment of existing communications and interpretive resources, baseline assessments, and identifying key informants (Figure 4.3).

4.5.1.1 *Assessment of Existing Resources*

One of the interviewee recommendations made in the first action research cycle was to undertake a benchmarking exercise for the project, by gathering examples of interpretive materials from other areas to set the standard for similar products in the SBWHA. Adopting this recommendation, interpretive materials were collected from other World Heritage Areas around Australia and the world.

This was followed by an inventory of existing communications resources in the SBWHA (including relevant materials produced by various government and tourism agencies operating in the area), to evaluate their accuracy, relevancy and effectiveness with respect to the stakeholder-derived objectives and key messages defined by via the first action research cycle, and outlined in the communications strategy. These communications resources were also compared with the benchmark materials gathered from other areas to assess relative product quality, presentation and usefulness, as well as gaps and redundancy in the available resources. This inventory and assessment is appended to the *SBWHA Interpretation Action Plan* (Chapman 2003), a copy of which is in **Appendix 8**. Essentially

the assessment recommended the modification or replacement of most existing interpretive materials in the SBWHA to achieve the following:

- bring messages in line with those identified as priorities by key stakeholders (Tables 4.1 and 4.2);
- ensure all interpretive materials developed for the SBWHA, regardless of which agency produces them, are consistent in terms of branding and presentation;
- ensure that wherever possible, interpretive installations are consistent with a SBWHA sign system;
- update accuracy and presentation of interpretive materials;
- streamline the suite of interpretive materials produced by different management agencies in the SBWHA, ensuring messages and information are not unnecessarily replicated;
- adopt a strategic approach to the spatial organisation of interpretive exhibits throughout the SBWHA, thereby helping visitors build their knowledge about the SBWHA in a logical, sequential fashion; and
- ensure interpretive information is relevant to the area in which it is presented and the audience it is likely to reach.

4.5.1.2 Baseline Assessments for Communications Monitoring

Monitoring and evaluation are essential components of communications programming. It was envisioned that the success of communication and interpretation projects in SBWHA would be measured in terms of achieving the stakeholder-derived objectives outlined in the communications strategy; as such, performance indicators were suggested for each communications objective. However, baseline data were required before specific and realistic target ranges for each of the performance indicators could be established. It was intended that stakeholders would assist in defining these target ranges, which would be quantifiable and time bound (eg. by the end of 2005, 70% of visitors should be able to identify at least two of the key reasons for Shark Bay's World Heritage status). Baseline data were also required as a benchmark for ongoing project evaluation.

Unfortunately, there was not enough time or funding to conduct the baseline assessments. Arrangements to secure a volunteer with a professional background to coordinate the assessments fell through. As a result, this component of the project was postponed and has yet to be completed.

4.5.1.3 Identifying Key Informants and Advisory Groups

Another stakeholder recommendation made in the first action research cycle was to establish a series of working groups to help provide the information required to develop a detailed and locally relevant interpretation plan for the SBWHA. In particular, specific knowledge and advice was needed on:

- Natural history
- Aboriginal heritage
- European heritage
- Land and infrastructure management
- Recreation and tourism
- Fisheries
- Pastoralism

- Funding and support
- Interpretive media and techniques

This recommendation was adopted, and groups and individuals were identified who could serve as *key informants*: people with specific knowledge and/or influence relevant to the above categories. Given the network of contacts made in the first action research cycle, identifying the key informants was quite easy and the researcher began to organise meetings and workshops with various groups and individuals. None of the key informants identified by the researcher declined to be interviewed, although a number of Aboriginal informants did fail to show for a workshop for reasons explained later in this section.

4.5.2 *Action*

The action component of the second action research cycle involved informally engaging key informants to identify: themes and stories for interpretation, media/channels through which the stories could be told, locations for interpretive sites, inter-agency/community communications needs, training and accreditation needs, funding options, roles and responsibilities of stakeholders in implementing plan components, and potential partnerships between agencies. This information would then be compiled into a five-year interpretive plan for the SBWHA.

4.5.2.1 *Collecting Stories from Key Informants*

This stage required identification and collection of the stories stakeholders felt were important to communicate about the SBWHA. This was done through a series of formal and informal interviews, workshops, and meetings with key informants in the Shark Bay community.

The Aboriginal community was approached first, as securing their input would take the longest amount of time given the lengthy consultation and deliberation processes required in most Aboriginal communities. It was also acknowledged that one of the greatest challenges for this phase of the project would be finding a way to engage the Aboriginal community that both respected Aboriginal protocol and kept to the allotted timeframe of the study. The researcher had virtually no knowledge of Aboriginal culture or protocol, but having worked with indigenous communities in Canada, she had an idea of what some of the bear traps were likely to be. Fortunately, cultural assistance was provided by the Denham-based Yadgalah Aboriginal Corporation Ltd, whose staff guided the researcher in the ways of Aboriginal protocol, supplied valuable information about the native title working groups and their claim boundaries, and acted as important advocates for the project. They also taught the researcher a few important Malgana words, including Gadhaagudu—the Malgana name for Shark Bay (meaning ‘twin waters’), and introduced the researcher to the elders of the community.

The approach with the Aboriginal community was very cautious; cultural appropriation is a serious issue for Aboriginal communities. The Denham community was approached first, as the researcher was already familiar to a number of the community members by virtue of living and socialising in town. The first people approached were the staff at Yadgalah, and the chair of the Malgana working group, all of whom had been interviewed during the first action research cycle. They were prepared to support the project, with the

assurance that the Aboriginal community maintained full control of what and how their stories were told, and as long as Aboriginal protocol was followed in the consultations. They determined how the Aboriginal input would be handled and how to go about the consultation. They also organised meetings with local elders and put the researcher into contact with the native title working groups. The project was tabled at the three Native Title Working Group meetings.

Although there appeared to be initial suspicion and concern—some community members were worried that they would not have control over what stories were told (some they did not want shared), or that the project was aiming to exploit Aboriginal culture for tourism—the native title groups agreed to participate in the project, largely because Yadgalah staff and the chair of the Malgana Working Group vocally supported the project. The claimant groups decided that the Yamaji Land and Sea Council (an umbrella organisation for claimant groups in the region) would host a workshop in conjunction with CALM, bringing together elders and other interested individuals to decide on the stories and information to be used in the project.

Parallel to this project, a group of Perth-based consultants were working on a recreation and tourism plan for the SBWHA. The native title working groups decided that the workshop would provide combined input for both projects, given the difficulty involved in getting such a group together.

Nine months after its conception the workshop finally took place. The working groups had decided at earlier meetings that individuals attending the workshop would not be paid a consultation fee; only travel costs, food and accommodation would be provided for. Elders and interested individuals were bussed to Denham from Carnarvon and Geraldton and an evening fish barbecue and welcome session was held at Yadgalah's function centre. The head of CALM's Aboriginal Liaison Unit introduced the two projects, and helped mediate the next day's workshop proceedings. The researcher and two consultants for the recreation plan also helped facilitate. For part of the session, a group of elders sat down together, and recalled their stories, mostly from their youth. Hand held tape recorders were placed around the table, and notes were taken. After the workshop copies of the notes and the original (and only) tape recordings were given to the Yadgalah Aboriginal Corporation.

The researcher also made a series of visits to scientists and groups of scientists with research interests in the SBWHA. A single meeting was held with all the scientists on the World Heritage Scientific Advisory Committee, representing expertise in the fields of botany, geomorphology, fisheries, and zoology. The scientists placed numbered dots on oversized maps of the area, indicating important features of scientific interest, while the researcher recorded commentary on each feature.

The researcher met other scientists singly or in small groups, again using a map and hand recording scientific phenomena the scientists believed were of particular interest. Some of the scientists also had interest in the anthropology and history of the area, and provided information in this regard as well. In all cases, the scientists were sent copies of the compiled notes to review and modify as they saw fit.

A pastoral heritage committee, representing station owners and managers throughout the Shark Bay area, had recently formed when this project started. The researcher met with the group on two occasions to brief them on the communications project. As part of a separate project with the Museum of Western Australia, the heritage committee compiled lists of artefacts and stories related to historic station life in the Shark Bay region. The committee supplied these lists for inclusion in the inventory of stories for this project.

The researcher also met with staff and historians from the Museum of Western Australia and the Carnarvon Heritage precinct.

4.5.2.2 Story Database

Before other aspects of the plan could be developed, the hundreds of story ideas collected from stakeholders needed to be organised. At this stage, it was not known which stories would end up in the final interpretive plan, but nonetheless, it was imperative that none of the stories were 'lost', as they constituted an important community resource. A story element database for the SBWHA (Appendix 9) was developed as a way of archiving, organizing and sorting the stories collected from stakeholders and key informants.

Story elements were also collected from existing published resources, such as history books about Shark Bay (many of the stories in these books were not mentioned by project participants, because they were the most obvious and well known stories about Shark Bay). These too were added to the database. The intent of the database was to serve as a dynamic community resource, a central repository for stories about Shark Bay that could be added to over time, and used for future interpretive development in the SBWHA, including that beyond the scope of the plan being prepared through this project.

The database was designed to be easily sorted by theme and subtheme (e.g. post settlement history, maritime history, management, conservation, etc.) or location. Story elements associated with specific locations were also given GPS coordinates. This enabled the production of a story element map, using GIS, which provided an excellent spatial representation of story clusters, highlighting good locations for interpretation.

4.5.2.3 Integration with Recreational and Tourism Planning

In September 2002 a team of consultants was hired to develop a recreation and tourism plan for the SBWHA. A large component of their plan involved identifying tourism impacts on the Shark Bay landscape, and making recommendations for existing and future recreational sites in the SBHWA. The communications project dovetailed with that of this team, and the two projects shared information and hosted a few joint workshops, including those with the Aboriginal community, the pastoral history committee, the local tourism association, and the Carnarvon community.

Unfortunately the production of the recreation plan lagged behind that of the communications plan, and the recreation consultants' recommendations were not available for consideration in this project. Nonetheless, much preliminary information was shared, particularly access concerns expressed by stakeholders in the discussion document. The recreation consultants were also able to make use of the story element database: they mapped the elements, and used them as part of their GIS analysis of potential recreational features in the SBHWA.

4.5.2.4 Synthesis and Brainstorming

The next stage involved synthesising all the gathered information into a detailed interpretive plan for the SBWHA. This information included:

- the communications objectives and key messages in the communications strategy;
- story elements database;
- interpretive media and channels, including ideas recommended by stakeholders in interviews;
- recreation sites and access corridors around the SBWHA; and
- tourism and other interpretive initiatives in and around the SBWHA.

Firstly, a series of themes for interpretation in the SBWHA was generated. This was done by synthesizing communications objectives and key messages with the pool of collected story elements. These themes are shown in Table 4.4, which depicts the series of themes as viewed from five different perspectives: the global (or scientific) community, indigenous people, maritime explorers, settlers and management. These perspectives represent the multiple narratives that together tell the Shark Bay story as a rounded whole. The exhibition consultants hired to develop interpretative content for the World Heritage Visitor Centre in Denham, were responsible for the initial conception of using different perspectives as overall themes for interpretation—an idea adopted for this project, given it reflects the major stakeholder groups in the SBWHA.

The second step involved determining where and how the themes should be interpreted. This required identification of appropriate techniques and media for interpreting these themes, identification of appropriate locations for interpretation, and generation of creative links between interpretive media. In addition, regional and statewide links with other initiatives and agencies, such as the Western Australia Museum in Perth and Geraldton, the Piyarli Yardi Aboriginal Culture and Heritage Centre in Carnarvon, and other CALM initiatives around the state, needed to be established.

A number of individuals who work in the fields of interpretation, communications and tourism, were brought together to brainstorm interpretive sites and techniques for this plan, and to identify links with other initiatives taking place in the wider region. Attendees included interpretation and tourism specialists from CALM, Fisheries, Museum of Western Australia, Yadgalah Aboriginal Corporation, Piyarli Yardi Aboriginal Heritage and Culture Centre, and private consultants for the proposed World Heritage Visitor Centre in Denham and the SBWHA recreation and tourism plan. The author of a recent tome on the history of Shark Bay also attended. A summary of the brainstorming session results is located in **Appendix 10**.

The third step required the compilation of a detailed interpretive plan for the SBWHA, to serve as a blueprint for producing interpretive products across the SBWHA, and to coordinate the efforts of the various agencies and bodies undertaking interpretive activity in the area.

Table 4.3: Interpretive themes devised for the SBWHA.

GLOBAL COMMUNITY	Shark Bay: its World Class
	Shark Bay is one of the world's most outstanding natural areas: it is one of only 144 natural areas on earth with World Heritage Status, and of these one of only 16 that meet all four criteria for World Heritage listing.
	There are four key reasons for Shark Bay's World Heritage listing: modification of the marine environment by seagrasses, hypersaline seawater, Hamelin Pool stromatolites, and important cat and fox-free habitats for threatened species.
	World Heritage listing has had both positive and negative effects on the Shark Bay community: it has brought a small isolated community into the global tourist economy.
	Shark Bay, discover the earth
	Seagrasses are the "builders of the Bay": by creating an enormous expanse of banks and sills, seagrasses have profoundly changed the physical, chemical and biological nature of Shark Bay's marine environment.
	Shark Bay is home to the largest seagrass banks in the world: they are the foundation of the Bay's marine food chain, and are responsible for feeding most of the Bay's marine life.
	Shark Bay is one of the world's few hypersaline marine environments, thanks to seagrasses and an arid climate: hypersalinity has made Shark Bay an evolutionary and biodiversity hotspot.
	Shark Bay's unique marine environment has given rise to the world's most abundant and diverse stromatolites: these organisms tell the story of the evolution of life on earth.
	Shark Bay is a classic example of island biogeography: because of its many prongs, peninsulas and islands, many threatened and endemic species live here.
	Shark Bay was formed by a number of ongoing sedimentary and tectonic processes: deposition of dead marine life, weathering by wind and water, and shifting of the earth's crust.
	Shark Bay is Australia's largest marine embayment: its sheltered waters are home to abundant and diverse marine life, including one of the world's largest and most important Dugong populations.
	Shark Bay is a meeting place for tropical and temperate waters and desert and temperate botanical zones.
INDIGENOUS	Shark Bay: traditional home of the Malgana, Nhandu and Yindjibarndi people
	Gadharagud (Malgana name for Shark Bay, translation: twin waters) is the traditional home of the Malgana, Nhandu and Yindjibarndi people
	Aboriginal people have lived in Shark Bay for thousands of years, adapting and shifting with changing sea levels and climate: they have borne witness to incredible changes wrought by time.
	Aboriginal people thrived in Shark Bay, moving with the seasons, but also maintaining permanent settlements at year-round water sources.
	Aboriginal people in Shark Bay were exposed to early European mariners: Aboriginal knowledge of country was essential to successful colonial settlement of Shark Bay.
MARITIME EXPLORERS	Contemporary Aboriginal people in the Shark Bay World Heritage area make significant contributions to the local economy, culture, businesses and conservation.
	Shark Bay: a treasure trove of maritime history
	The first known European landing in Australia took place on Dirk Hartog Island in 1616.
	Ships from around the world explored and exploited Shark Bay's resources, providing an early link between Shark Bay and the global economy.
	The first Australian plant and animal specimens brought to Europe came from Shark Bay, collected by early maritime explorers
SETTLERS	Shark Bay was considered by many early explorers to be a miserable and useless place, because they were unable to find water or fruit and vegetables to ward off scurvy, and because of the lack of trading opportunities.
	Shark Bay was one of the two best anchorages in WA, and a distinctive navigational feature for early maritime explorers, providing sheltered waters and abundant fish supplies.
	Shark Bay: a microcosm of early Australian industry
	Guano mining was Shark Bay's first industry: Shark Bay guano was considered among the best in the world, and was mined and exported by ships from around the planet.
	Pastoralism, sandalwood cutting, and telegraph communications were early industries in the Bay.
	Shark Bay's pearling and pearl shell industries were responsible for bringing global flavour to the Shark Bay community: Malays, Chinese, Koepangers, Afghans and Europeans intermingled to create the Bay's distinctive community. The pearlers moved around the Bay as they exhausted successive pearl beds.
	In its early days, Shark Bay was bustling with industry, and many more people lived here than do today: although it may seem like wilderness today, most of the Bay has been exploited by industry in some way or another.
	With the decline of the pearling industry, fishing became Shark Bay's dominant industry: in particular, a unique form of beach seine net fishing practiced by fishers of Aboriginal-Malay descent.
	Townlife in Old Shark Bay: "we had nothing, but we had everything... we were free."
	Whaling was a major post-war industry in Shark Bay: Camarvon's whaling station was responsible for a major portion of the international whale take. When the whales were exhausted, the industry was replaced by prawn trawling and crayfish harvesting.
	Shark Bay's unpolluted, hypersaline waters and shallow inlets led to the creation of a salt mining industry, creating salt using the same physical, chemical and biological processes which take place naturally in brinidas.
	Shark Bay today
	Contemporary Shark Bay is a unique mix of Aboriginal, Malay, Afghan, European and other cultures that arose from years of relative isolation from the rest of the world - Shark Bay is special because these cultures peacefully coexist.
	Tourism is now the Bay's largest industry; Shark Bay's international status as a tourist destination has brought it from a period of relative isolation back into the global arena, as it was in the days of guano mining and pearling.
	Conservation and natural resource management in Shark Bay is based on extensive research, and is often globally ground-breaking.

MANAGEMENT	Shark Bay: its in your hands
	Shark Bay is in your hands - help keep Shark Bay world class by taking care of this fragile environment.
	Shark Bay's fish stocks are shared not limitless: help conserve fish for the future by fishing for a feed, not for the freezer.
	Shark Bay: yours to discover
	Shark Bay is an enormous 2.3 million hectare expanse of land and sea, encompassing a wide array of natural features and processes; its sheer size can make discovering and managing Shark Bay challenging and difficult.
	Shark Bay is a spiritual place: share the passion residents feel for Shark Bay by discovering its subtle nuances and experiencing its changing moods.

This stage of the project involved more informal consultation. Wherever a recommendation was devised which had relevance to a specific stakeholder group, representatives from that group were consulted for confirmation and advice. These consultations included:

- conversations with land holders to determine their interest in hosting interpretive displays on their properties, and appropriate construction materials, presentation and topics;
- recommendations on construction methods and materials for outdoor displays from local stakeholders in the building industry.
- discussions with other agencies about linking the SBWHA project to other initiatives in the region;
- advice from government agency staff on interpretive resources they believed would or wouldn't work; and
- discussions with Department of Fisheries and CALM staff about potential modifications to existing publications and interpretive displays, which would bring these products in line with the stakeholder-derived communications objectives, and incorporate stories gathered from the Shark Bay community.

The plan was specifically designed to meet the stakeholder-derived objectives outlined in the communications strategy. In particular, the plan outlined:

- topics for interpretation in the World Heritage area, and specific details on where and how they should be interpreted (eg. sign board displays, brochures, interpretive trails, tours, magazines and newspapers, websites, etc.);
- foundation products required prior to developing interpretive products, including a style manual (with logo templates, slogan, colour scheme, layout templates and font style), image library, Aboriginal language catalogue, sign manual, and a story manual containing comprehensive information about Shark Bay's natural and cultural heritage, visitor information, and minimum impact information;
- a branding scheme for the SBWHA, including logo, slogan, colour scheme, sign manual, standard copy and image library;
- training opportunities for tour operators, the business community, and government staff;
- links and coordination with other initiatives taking place in and around Shark Bay;
- steps required for effective implementation of the plan, including the formation of a community-based foundation to administer the plan and associated contracts; and
- the roles and responsibilities of stakeholders, approximate costs, and an implementation timetable for each action item.

A copy of the plan is located in **Appendix 7**.

4.5.2.5 Presentation of Plan to Stakeholders

The final step in producing the interpretive plan involved presenting it to stakeholders. A presentation was prepared outlining the plan recommendations, and samples were gathered of benchmark products recommended by the plan for the SBWHA. A brief PowerPoint presentation outlining Shark Bay's World Heritage values was also prepared for the benefit of groups unfamiliar with them.

Due to time constraints, the researcher focused on making presentations to groups who would have most influence over successful implementation of the plan. These groups included:

- Local and regional Tourism Associations
- Shark Bay Chamber of Commerce
- Shire of Shark Bay president and CEO
- CALM staff
- Aboriginal Community representatives
- Shire of Carnarvon CEO and head planner
- President of the Carnarvon Rotary Club
- Head of the Pastoral Heritage Committee
- Regional Development Commission
- CALM executive
- CALM-hosted interpretive seminar, with the WA museum and CALM interpretive staff from across the state.
- Regional community development funding agency
- Various other community representatives

Digital versions of the communications strategy, interpretive plan, and story element database were copied onto CDs and distributed to all the groups and individuals who participated in the project, thereby ensuring broad ownership of the project's final products.

4.5.3 Practical Reflections

The following is a practical reflection on the second action research cycle: a deconstruction of what worked and what went wrong.

4.5.3.1 Collecting Stories from Key Informants

It was anticipated that this process would involve intense facilitation, repeated consultation with key informants, and careful working through of areas of disagreement. However, the consultation process was actually quite simple, and the researcher rarely had to renegotiate decisions with key informants or working groups.

The informal consultations seemed to work quite well; the only major problems encountered were in relation to formal workshops, reinforcing the researcher's belief that informal negotiations with individuals or small groups may provide better results than workshop scenarios, and in the long run may save time and effort. For example, there

was a poor turn-out for the Aboriginal workshop. Only a core group of elder women and a few younger men and women showed. Initially, the reasons for this were unclear, particularly since the introductory barbecue the night prior was well attended. From talking to people afterwards, it appears there were two major factors. Firstly, some of the men from Carnarvon had not realised they would not be getting paid a consultation fee until the night of the barbecue. They chose to drive back to Carnarvon the next day rather than attend the workshop. Secondly, the results from a local Aboriginal and Torres Strait Islander Commission election had been announced the day before. There was some upset between the two candidates and their camps, and as a consequence, many people, including the two candidates (both influential people in the community) avoided the workshop.

Combining workshop agendas with that of the recreation consultants also created problems. There were too many objectives for the workshop, and too many facilitators with no single person in charge. The agenda was abandoned as discussion strayed to topics unrelated to the tabled projects, and became dominated by a couple of individuals. The researcher managed to separate the elders from the rest of the group after lunch. Fortunately, they were eager to reminisce with each other and tell their stories. Unfortunately, many of the younger members who remained with original group discussion missed hearing the elders' stories.

Despite its failings, feedback indicated that the Aboriginal community was reasonably happy with the workshop outcomes. Fortunately the researcher had collected some stories from elder men in the community during interviews in the previous action research cycle, providing some balance to the women's stories.

Suggestions from community members indicated that the Aboriginal community should have been actively engaged earlier. In addition, key elders who did not attend the workshop could have been sought out and interviewed separately. Ideally, however, there would have been funds to train and hire members of the Aboriginal community to collect the stories themselves. Tape recorded interviews with elders could have been used to start an oral history library for the community.

4.5.3.2 Brainstorming Session

At this stage, the researcher felt that all the subject matter input that was needed had been collected from the community, and that this information could now be presented to interpretation professionals to get some creative ideas on how this information could be conveyed (i.e. what media or channels could be used). As such, the researcher intended to keep the brainstorming session 'technical', by only inviting professionals in fields related to interpretation. However, when, as a matter of courtesy, the Shark Bay Shire was notified of the session, the news sparked another upheaval among the same individuals who were upset with the discussion document, because they had not been invited. In this case, however, the situation was defused relatively quickly by way of additional explanation about the purpose of the session, and by extending an invitation to any local council members who wished to attend (none took up the offer). This situation could have been avoided had the idea of the brainstorming session been discussed with local council members prior to setting-up the session. However, at this time, the researcher's relations with the Shark Bay council were still quite poor, so too was communication.

The brainstorming session did not produce results as hoped, as much of the day was spent bringing the attendees up to speed on the features, themes, geography and importance of the SBWHA (the agenda was over-ambitious), and the anticipated synergy between talents never really materialised. However, the session did familiarise the group with the project, SBWHA, and each other, an important outcome in itself. There was considerable positive feedback from the session, and the project gained future support from attendees, which it would not otherwise have had. In addition, the session was a catalyst in that some of the attendees began dialogue about joint projects, resource sharing, and future partnerships.

In hindsight, bringing this group of professionals under one roof was an important event, especially given that many of these people had not met or worked together before, and given that their support lent significant credibility and profile to the project. However, the event could have been simplified to include a project presentation with a feedback session at the end.

In retrospect, a more appropriate approach to this step would perhaps have involved engaging the local Shark Bay community in developing, reviewing and providing feedback on ideas for interpretive materials. To some extent, this was achieved in the project presentations.

4.5.3.3 Presentations

The final presentations were an important last step in gaining support for implementation of the interpretive plan. There were fears that the plan would be shelved and forgotten once the researcher had finished her contract and left the area; it was hoped that the presentations would increase the likelihood of the plan being adopted by the community. Initially the researcher was pessimistic, as she was still on the political blacklist with the local influential stakeholders in Denham. Also, by virtue of the jointly-held workshops, the project had been tainted through association with the recreation and tourism plan, which was being touted by some in the community as yet another CALM land grab.

The Carnarvon-based local government, rotary club and regional development commission were approached first. Carnarvon is always eager for new tourism opportunities, as they tend to be bypassed in favour of Denham and destinations further north. In addition, the Carnarvon community had not been involved in the political furore that erupted over the discussion document. As a consequence, representatives from this community supported the plan, and expressed interest in administering it through Carnarvon, rather than Denham. In contrast, the Shark Bay Shire appeared non-committal, and the researcher was unable to get on a council meeting agenda to present the project to the Shark Bay Shire council.

Fortunately, the researcher was successful in getting an audience for a Shark Bay Tourism Association meeting (consisting of local business involved in the tourism industry). The initial reception was cool; unbeknownst to the researcher, a rumour had spread before the meeting that the plan being presented would involve restricting access to more areas in the SBWHA (this was because interpretive plan had become mixed up with the recreation and tourism plan in the minds of some residents). Unwittingly, this rumour had positive consequences, because it generated extraordinarily good attendance for the meeting. After the presentation, when the researcher finally focused on the audience, she found

herself fronting a room full of stunned faces: the plan was not what they had expected (a bureaucratic dictate supporting CALM's corporate objectives), rather it represented much of what *they* themselves had been looking for (a plan supporting their own aspirations and ideas). Audience members asked how they could help implement the plan; some attendees even made immediate offers of funds to help kick-start the project. Upon learning that Carnarvon was interested in administering the project and that the Shark Bay Shire appeared noncommittal, attendees made a motion to actively support to the project, and work to keep the project based in Denham.

Word quickly got around, and members of the association made arrangements for the plan to be presented to the regional tourism association, the Shark Bay Chamber of Commerce, local government, and regional and community development agencies. The plan was presented to various other influential stakeholders on a one-on-one basis. The community-based nature of the plan, its appeal to all the area's stakeholder groups, and its detailed prescriptions generated broad support. By the time the researcher's contract was completed, the Shark Bay Shire was in clear support of the project, and discussions were underway about handing the plan implementation over to the regional development commission or the Shark Bay Chamber of Commerce to ensure it remained community-based.

Fortunately, this last-ditch effort to salvage community ownership of the plan succeeded. The proof was in the pudding, so to speak, and once presented with the plan, community members saw that their input had been considered and that the plan was based on the aspirations of the whole community, rather than CALM's mandate alone. However, it also clearly illustrated that the researcher had dismally failed to communicate where all the planning and consultation conducted over the last 18 months was going, despite numerous press releases and discussions with stakeholders. The researcher believes that this was in part because communications about the project were being drowned out by an ongoing counter-campaign against the project and the researcher issuing from those individuals who were offended by stakeholder discussion document: many people were not listening to the researcher, either because they no longer trusted her, or because her credibility had been destroyed. The communication failure was probably also in part because people were not shown examples of interpretive plans and products to give them a concrete idea of what the project outcomes would be; many people tune out when confronted with the abstract notions typical of many planning processes and documents. Also, the researcher had also lost enthusiasm for the project after the political uproar surrounding the discussion document, and as a result, was unable to reinfect others with the optimism garnered by the project in its early stages.

In hindsight, more effort should have been put into demonstrating what the final project outcome would look like, and more time spent talking to and re-establishing relationships and trust with the locally-based stakeholders.

Despite the plan's generally positive reception, there were criticisms. One individual was concerned that using Aboriginal language and identifying the traditional Aboriginal owners of the SBWHA in interpretive products—as recommended in the plan—could jeopardise non-aboriginal interests in land claim negotiations. This individual also felt there was perhaps too much focus on Aboriginal culture, and argued that Aboriginal people had never inhabited some of the areas where the plan proposed their history be

interpreted. Others felt that science and the importance of research activities did not receive sufficient attention in the plan.

In addition, some of CALM's corporate executive appeared wary of the community-based nature of the proposed plan implementation, and expressed concern about losing control of the project should implementation be handed over to community groups or conducted through a community-based foundation.

Unfortunately there was not time to host open public presentations for the Shark Bay and Carnarvon communities. However, it was emphasised that the interpretive plan should be considered a 'work in progress', and that it be widely presented to the local community for review and comment as a first step towards implementation. At the time, the researcher felt that it was important to get influential stakeholders onside before going to full public presentations, in order to avoid a CALM-bashing episode and to ensure more meaningful public input.

4.6 Stakeholder Evaluation and Reflection

Given this study is founded on the principles of collaboration, participation and action research, at the end of the project, a group of representative community stakeholders were asked to evaluate the project and reflect on its outcomes.

4.6.1 Methodology

The researcher asked a small selection of stakeholders to volunteer as informants for debriefing interviews. Their responses were used to provide a stakeholder assessment of the project. Questions asked in the debriefing interviews explored the stakeholders' thoughts with respect to:

- whose interests are represented in the communications objectives and key messages derived via the first round of interviews?
- whether or not they felt their thoughts and ideas were reflected in the communications and interpretation plans.
- whether or not they felt the plan would be helpful, and if so, how?
- whether or not participating in the planning process affected them or changed their view, and if so, how? and
- other comments and suggestions for the planning process.

The interview candidates were selected to provide a diversity response, and included the following:

- local government councillor,
- local manager for CALM,
- local World Heritage staff member,
- professional fisher,
- local tour operator,
- local accommodation provider,
- scientist with research interest in the area,
- representative from Aboriginal community, and

- local government councillor and recreational fisher.

The researcher selected people whom she perceived to be negative towards the project, as well as those she felt would be positive or neutral. The two local government councillors and the scientist were among the stakeholders who were upset with stakeholder discussion document, and who were involved in the furore that followed its release. These three informants were selected because it was felt they would provide an unflinchingly critical view of the project. The researcher believed that the World Heritage staff, commercial fisher, accommodation owner, and Aboriginal community member would be fairly neutral, and felt they would give balanced responses. The tour operator has had a long stormy relationship with CALM, so it was believed he would respond with scepticism. In contrast, the researcher was fairly certain the CALM Manager felt positively about the project, and would respond accordingly.

The participants were asked to volunteer on the basis that the results of their interviews would become publicly available, and that although their names would remain anonymous, a general description of their area of employment would be included. Participants were notified of these conditions in writing, and were given the opportunity to review and modify the researcher's transcripts of their interview before giving their consent to its publication.

4.6.2 Results

The interview transcripts are in **Appendix 11**. **Tables A11-1-5** compare the results from the debriefing interviews. The responses indicate that all the informants were generally satisfied with the project, primarily, it appeared, because they believed the community was widely and fairly consulted, and that the community's concerns were listened to and represented in the final result. Surprisingly, overall satisfaction was expressed by the four informants expected to be negative towards project. It also appeared that the informants were comfortable with pointing out problem areas and making constructive suggestions (as opposed to blanket criticisms). The most prevalent criticisms related to poor political handling of the reaction caused by the discussion document.

The results from the debriefing interviews are presented in detail in chapter 5, where they are discussed in relation to theory in the literature.

OUTCOMES AND CONCLUDING REFLECTIONS

"Sustainability, is better seen as a measure of the relationship between the community as learners and their environments, rather than an externally designed goal to be achieved"

-Sriskandarajah et al (1991).

5.1 Introduction

In this final chapter, the project results are related to the research questions:

1. What participatory methods can be used to engage a polarised community in a collaborative planning process?
2. What sorts of outcomes are derived using a participatory approach to communications/interpretive planning for environmental management?
3. What are the implications of these outcomes in relation to interpretive planning?
4. What are the implications of these outcomes to environmental management?

The following discussions draw largely on the interview results from the stakeholder evaluations completed at the end of this project (transcripts located in **Appendix 11**), as well as comments made during interviews for the first action research cycle and presented in the stakeholder discussion document (**Appendix 3**), and observations made by the researcher over the course of the project. The interview results and observations are discussed in relation to the above research questions, and analysed and compared with theories documented in the literature from a variety of fields, including community development, environmental management, interpretive planning, knowledge management, sociology, and organisational management.

5.2 Outcomes of participatory approach to interpretive planning & methods for engaging a polarised community

Nelson and Wright (1995) distinguish between instrumental and transformative participation. Instrumental participation is concerned with participation as a *means* to achieve something, such as increased project efficiency and effectiveness. Advocates of instrumental participation indicate that the collaborative collection of data by both the researcher and those who are being researched (i.e. participants) leads to: identification of the multiple contexts, individuals and processes at work in the situation (e.g. Parkes and Panelli 2001); improved knowledge base for decision-making (e.g. Robertson *et al.* 2000); strengthened legitimacy and democracy of the decisions reached (e.g. Caddy & Vergez 2001); and greater commitment among participants to see the plan implemented (e.g. Eden & Ackerman 1998).

Transformative participation is concerned with participation as an *end* in itself, and is associated with outcomes such as: empowerment of poor and marginalised sections of

society; building of social capital, and improvements in community capacity. Advocates of transformative participation see that it delivers empowerment to the people, by giving them the resources and power to control their own development, or in fact delivering empowerment by transforming consciousness and making the poor and marginalised aware of how their own views sustain their suppression (eg. Friere 1970, Rappaport 1987, Fals-Borda & Rahman 1991, Chambers 1997).

Researchers have also identified some of the pitfalls associated with public participation, including: contention, co-option and manipulation, and stalemate (Johnson & Campbell 1999), as well as reinforcement of racism and elite control (Swanson 2001), silencing of marginalised groups and reinforcement of local inequities (Mohan & Stokke 2000), and inhibition of activities which threaten the status quo despite potential group benefits (Coleman 1990; Putnam 1995; Salamon *et al.* 1998).

These participatory effects have not been previously examined in an interpretive planning scenario, despite the potential for participatory planning to address the need for multiple narratives in contemporary interpretative planning. The following discussion describes and interprets the instrumental and transformative outcomes of participatory interpretive planning processes undertaken in this study, as well as the benefits and pitfalls of the participatory methods employed. In addition, the role of the researcher in the participatory process is examined.

5.2.1 *Instrumental Outcomes*

A participatory approach to this project was adopted for instrumental reasons, that being to improve the plan as a 'product' by tapping into the collective knowledge held by the Shark Bay community, and garnering community buy-in to its implementation. The following describes the instrumental outcomes of the planning process, and how these outcomes relate to the various fields of literature on participation. This discussion also helps to reveal some of the underlying causes of the ongoing community conflict over the SBWHA.

5.2.1.1 *Identification of multiple contexts: community issues and 'emotional toxic waste'*

Shark Bay's nomination for World Heritage listing in the late 1980's was not welcomed by an overwhelming majority of local residents, who fiercely opposed the listing. Nonetheless, the federal government pushed ahead with World Heritage listing for Shark Bay, albeit with concessions that pastoral, fishing and shell mining industries be maintained within the World Heritage area, and the Denham townsite and salt mining operations be totally excised. The consequences of forcing through the listing without local community support have been far reaching: despite concessions and the years that have passed since the 1991 listing, much of the original opposition remains, and CALM and the local Shire continue to have serious differences with respect to administration of the area.

Protection of areas from human interference has long been viewed by many scientists and policy makers as having a pivotal role in conservation (eg. Figgis, 2002), and the exclusion of people and human activity from protected areas has a long and ongoing history. However, ongoing hostility and angst, such as that expressed by Shark Bay locals with respect to World Heritage listing, is not an uncommon phenomenon in areas where local

people have had protected areas imposed on them. The United Nations Environment, Sustainable Development and Social Change programme has examined the social impacts of environmental protection policies and initiatives in its discussion paper titled: *Parks, people and professionals: putting 'participation' into protected area management* (Pimbert & Pretty 1995). According to Pimbert and Pretty (1995), the expansion of the global network of protected areas, while making important contributions to biodiversity conservation, has removed vast areas from human use, affecting the livelihoods and cultures of human communities around the globe, particularly those of indigenous people. Many of the concerns and issues raised by the local Shark Bay community are also touched on by Ghimere and Pimbert (1997), in their text *Social Change and Conservation*, which argues for a radical reworking of current conservation thinking in the face of issues about conflict, rights, power, politics and sustainability, and the failure of so many conservation policies world-wide. According to Ghimere and Pimbert (1997), declaration of natural areas as "internationally important" is irrelevant to locals if the results of such are not discussed and resolved with the local community, and if they do not themselves receive immediate and quantifiable benefit from the designation (Ghimere & Pimbert 1997).

Resolution of conservation policy with communities is often fraught with difficulty because members of conservation agencies and local people typically have very different world views and priorities. Geertz (1983) suggests that fostering social interaction between people with different world views is a three step process: firstly, the depth of differences between groups must be accepted; secondly, what the differences are must be understood, and thirdly, these differences must be publicly formulated using a common vocabulary. The in-depth interviews conducted during the first action research cycle of this study relate to Geertz's first step in that they helped uncover some of the root causes of the local community's hostility towards World Heritage listing and CALM's administration of the World Heritage area. These causes were largely related to: loss of control to external agents, denial of access to previously accessible areas, perceived indifference by external agents towards the local community, and upheavals and losses endured by community members as a result of the changes wrought by the listing.

Anxiety associated with losing control to outsiders is evident in a number of comments from the first action research cycle interviews (located in the discussion document in **Appendix 3**), such as "Shark Bay is losing the reasons people once loved to come here, because outsiders are coming in and changing the place," (p. 77) and "When new people come in to Shark Bay (particularly those from agency headquarters in Perth) and try to change things and make decisions without local input and knowledge, the local people get upset" (p.77). Fears about external non-representative interference in local decision-making are well illustrated by this declaration (p.76): "Government agencies must appreciate that outside control of Shark Bay's affairs is not acceptable; locals want empowerment and control over how Shark Bay is run—non-elected representatives should not be exerting most influence in the community." In addition, Edwards (1999, p.382) quotes Les Moss, current Shire President, about the community's perspective on World Heritage listing, "Our view was always that local government, aware of local conditions, could best direct our own interests. We didn't want to be controlled by Canberra and certainly didn't want to answer to World Heritage headquarters in Paris."

Some locals also expressed concern over not being given genuine opportunities to provide input and influence management planning. As one local government councillor stated in

the evaluative interviews at the end of the project (**Appendix 11**): "the community feels hijacked by World Heritage listing. They have been over-consulted— they have not seen their recommendations incorporated into previous planning processes, and feel it doesn't matter what they say, that they are being ignored." Luz (2000, p.159), in his study on German landscape planning projects, found that among the public "emotional bias resulting from previous negative experiences often represents an important impetus for allegedly irrational reasons for rejection." Luz (2000, p.152) calls this "emotional toxic waste" and suggests that planners consistently ignore the 'toxic waste' produced by their predecessors, despite its ability to cause subsequent planning projects (even good ones) to fail.

Ghimere and Pimbert (1997) touch on such issues of power and control, observing that local communities typically have a weak power base relative to the other groups, and therefore have little involvement in decision-making associated with protected area establishment and management. Even when local participation is encouraged in planning processes, they argue, 'participation' in parks management and planning is still typically seen as a means for achieving externally decided conservation goals, and limits are placed on levels of participation tolerated in protected area management. True devolution of power to local communities seldom occurs because bureaucracies are set up to inhibit devolution of power (Ghimere & Pimbert 1997).

Concerns about being denied access to previously accessible areas are also noted in the discussion document (**Appendix 3**), with comments such as "the local community is worried that more access will be lost - not knowing what is happening with the access creates a lot of anxiety" (p.22), and "CALM needs to do a better job of explaining to residents why they've locked up certain areas, otherwise they will continue to alienate the community" (p.22). Ghimere and Pimbert (1997) note that exclusion of local people from resources in protected areas reduces their incentives to conserve them. They also note that poorer individuals, particularly those who do not own land or business interests, are least compensated when their economic means is disturbed or halted by the protected area. In Shark Bay, for instance, in cases where pastoral stations were purchased for incorporation into the conservation estate, the station owners were compensated, but station hands, shearers and other staff lost part or all of their livelihoods (although one station hand was kept on as a CALM employee for a length of time).

Belief that government agencies are indifferent to the needs of the community are also reflected in the discussion document (**Appendix 3**), with comments such as "the original residents have been lost and forgotten in all the change that is taking place in the Bay" (p.77), and calls for appreciation that "Shark Bay is also a place where people live—need to find a happy medium to protect both the people's needs and the environment's needs in the World Heritage area—both have to survive" (p.5). Other locals were upset with respect to CALM's perceived disregard for locally important landmarks, such as windmills and other pastoral infrastructure, and locally used place names. Ghimere and Pimbert (1997) show that there is real indifference towards local people in protected area management. They observe that parks and protected areas are viewed by conservationists, biologists and managers as places for plants and animals: vast undisturbed areas with spectacular scenery and habitats for rare and important species, which should be managed to maintain their pristine nature. These groups often fail to see that natural spaces have in fact been strongly shaped by historic human presence and activity, or that often the

biodiversity they seek to protect may be created by anthropogenic sources (Ghimere & Pimbert 1997). As such, Western conservation models create "artificial, idealized landscapes in which local people have no place," and protected area management "rarely begins with the notion that biodiversity-rich areas are social spaces, where culture and nature are renewed with, by and for local people" (Ghimere & Pimbert 1997, p. 7-8). Scientists and conservationists who recommend protected status do not need to deal directly with local communities, nor are they accountable to an electorate; this allows them to neglect or discount social needs or impacts relevant to protected designation (Ghimere & Pimbert 1997). Protected areas aim to protect natural features: improvement of local people's socio-economic conditions is not a goal.

Other local community members reported that World Heritage listing was socially damaging because it created long-standing divisions within the community, and resulted in marginalisation of the original inhabitants (primarily fishers of Aboriginal-Malay descent) because of increases in tourism and tourism-related economy. For example, one interviewee in the discussion document (Appendix 3) refers to the social angst caused by World Heritage listing and outside intervention, calling for "recognition of what the locals sacrificed for World Heritage listing, emotionally, physically and mentally: all the outside government pressure telling the community what to do created some real divisions in the community" (p.5). Such social upheavals and divisions can be partially explained by the differential costs and benefits experienced by communities affected by protected area designation. Ghimere and Pimbert (1997) note that numerous social groups benefit from protected areas, including bureaucrats, politicians, tourism operators, environmentalists, merchants, large land owners, and urban populations, whereas weaker social groups, particularly those dependent on resources within the proposed protected area, are most negatively affected by restrictions imposed by protected status. Kay and Alder (1999), in their text on coastal planning and management, similarly note that community-based stakeholders are most affected by planning decisions, as they typically have the greatest amount of restriction placed on their use of the area's resources, and are burdened with the financial and social consequences that result.

In Shark Bay, for example, locals and newcomers involved in the tourism industry benefited, whereas the traditional commercial fishing industry experienced increased restrictions and competition with recreational fishers, and therefore loss of control and economic status in the community. Baum (1998), in his Baltimore case study on participatory community planning, observed that planning arouses anxiety among community members, and that communities tend to resist and avoid thinking realistically about their problems and planning for solutions. He suggests that this is because planning results in change, and works against the community's attempts to preserve the "community of memory." In the case of Shark Bay, this 'community of memory' is one of an isolated fishing and sheep farming community, with no roads in, few tourists, and very little influence or governance by the outside world: a sharp contrast with today's situation, where the area sees up 180,000 visitors per year.

In summary, public formulation of the individual interview results in the discussion document (Appendix 3) was a tool for helping stakeholders realise and understand the differences between them, as per Geertz' (1983) steps for improving social interaction. It was also a tool for revealing some of the 'emotional toxic waste' that had been created by

previous planning processes. Not only did this provide the opportunity to air differences, but it also paved the way to identifying common ground within the community.

5.2.1.2 Identification of individuals and processes at work: neutralising power relations, the way to common ground

At project conception, the researcher found the stakeholders polarised roughly into two camps, with resource management agencies and researchers in one, and members of the local community in the other: there appeared to be little common ground between the two. From speaking to people, the researcher also found that members from both camps typically believed that the opposing group held very different values and agendas relative to their own.

However the discussion document (Appendix 3) and Delphi rounds (Appendix 6) of the first action research cycle revealed that there was in actuality a substantial of common ground between outwardly polarised stakeholders. This was apparent in the large number of similar comments compiled in the discussion document. It was also apparent in the Delphi questionnaire results, where environmental concerns and World Heritage messages were given the highest collective ranking by respondents.⁵ (see Appendix 6). Common ground was also indicated in how few negative comments were made with respect to the communications objectives and key messages (Tables 4.1 and 4.2 in Chapter 4) derived from the discussion document, and the number of individuals who indicated that they thought all the objectives were of equal or near equal priority. Comments made by participants in the stakeholder evaluation interviews (Appendix 11) point to the fact that some stakeholders were unaware that there was so much common ground within the community, reporting: "it's amazing that you got evidence of a large amount of common ground in town," and "I saw people were thinking very much in line with what I was thinking...this surprised me... Everything fell into place after the prioritization [Delphi ranking] was done-I didn't have to say much after that, because I saw that most people thought the way I did."

Allen *et al.* (1998) describe a participatory process in a situation where conservation initiatives had polarised local community members and conservation agency staff. As in the case of Shark Bay, the process revealed a large amount of common ground between locals and agency staff, particularly in their commitment to resolving conservation issues (Allen *et al.* 1998). Pelletier *et al.* (2003, p.304) also describe a participatory process whereby a commonly expressed comment was "I had no idea others felt the way I do about these issues." They suggest that collective discussion may be necessary for "salient values to surface and for collective action to form around these values."

The failure of individuals to come forward publicly with opinions sympathetic to opposing camps can be explained by social psychology theory in relation to group processes. Processes which appear to have particular relevance to the Shark Bay situation include 'groupthink' (Janis 1982), whereby critical independent thinking is replaced by non-dissenting support for the views of an 'in-group', to which individuals desire

⁵ Kay and Alder (1999) note that public participation processes used to produce and revise the Shark Bay Region Plan, 1988 and 1996, (focusing on tourism planning) similarly revealed a consensus among stakeholders that careful management of the Shark Bay environment was essential to sustainable economic development.

membership; and coercive persuasion (Schein 1987), whereby group processes are deliberately manipulated to achieve a predetermined agenda. Cooke (2001), in his discussion on the psychological limits of participation, notes that these concepts demonstrate how individuals' thoughts, feelings and behaviours are influenced by the presence of others. He suggests that these concepts indicate problems that can potentially arise during group interactions in participatory processes. In the case of Shark Bay, for example, the same vocal individuals tended to dominate public meetings, often with strenuous opposition and criticisms towards CALM and World Heritage. Conversely, CALM staff were highly defensive, with staff tending to group together and isolate themselves from the wider community. Staff members frequently rationalised criticisms from the local community by stereotyping locals as indifferent or hostile to environmental concerns. Finding common ground among Shark Bay stakeholders was reliant on quieting of prevailing rhetoric of various groups, providing a safe space in which people could air their opinions without fear of repercussion, and supplying an anonymous means by which people could view their own opinions in context with everyone else's.

The success of this study in identifying common ground between polarised groups can be tied to the use of individual interviews as part of a modified version of the Delphi technique: a method specifically designed to overcome group dynamics and to reveal group values. The Delphi technique achieves this by avoiding face-to-face contact between participants and ensuring anonymity of all participant responses, thereby eliminating the possibility of either manipulative or inadvertent group dynamics coming into play. Mansbridge (1994, p.56) in her discussion on power, coercion and democracy, declares that power should not "interfere with impact of the better argument," yet notes that this creates a dilemma in that "there are no deliberative spaces into which power does not enter" (p.63). The Delphi technique *does* however create deliberative space free from power, similar to Habermas' (1989) 'ideal speech situation' of uncoerced rational dialogue among free and equal participants, by creating a situation where participant comments are judged on merit, rather than on the basis of *who* made them. Using interviews and the Delphi technique clarified community feeling about the SBWHA, and helped stakeholders recognise that they have a large amount of common ground, including a common values platform. It also demonstrated that the community was not as divided as was widely believed, and provided future direction towards which all stakeholders could work.

Eden and Ackerman (1998) note that using anonymous interviews is a useful way of avoiding 'group-think', and creating low key, low threat environments in which people are more prepared to raise issues and share their knowledge and beliefs. Similarly, Wondolleck and Yaffee (2000), in their examination of successful collaborative approaches adopted by natural resource management agencies, note that swapping public meetings for informal 'one-on-one' and 'face-to-face' talk with community members created greater community enthusiasm for developing plans and generating consensus. This is consistent with Hailey's (2001) findings that formulaic group participatory approaches were *not* used by highly successful South Asian NGOs, and supports the decision to use one-on-one interviews to collect stakeholder information for the first action research cycle of the Shark Bay project.

5.2.1.3 Legitimacy and representation of multiple community interests

When identifying stakeholders for public consultation, government agencies have a duty to ensure fair representation from the affected local community, particularly the

"voiceless" (Government of Western Australia Citizens and Civics Unit 2002). However, Wondolleck and Yaffee (2000) note that one of the major problems encountered in collaborative decision-making processes is difficulty in achieving stakeholder representation. In particular, they note that although open access to collaborative planning is symbolically important, it is critical that key leaders and decision-makers participate in order to ensure that those who will be most affected, those with most control, and those most likely to lead to appropriate behavioural changes, are at the table and effectively participating and representing the community's various segments (Yaffee & Wondolleck 2000). Likewise, Eversole (2003), in her examination of development projects for indigenous Australians, notes that good faith attempts achieve participation are often not enough, as local people may fail to attend community meetings, particularly if they feel they have not been listened to in previous consultation processes. Representation by diverse community interests in participatory processes, however, does not on its own lead to *legitimate* representation. Pelletier *et al.* (2003) note that even in seemingly fair participatory exercises, power influences agenda setting and issue identification, and that not all the common interest is necessarily identified as a result, nor the interests of all subgroups. In fact, Kapoor (2002, p.109) notes that "without checks against unequal power relations among participants...there appears to be little scope for preventing coerced outcomes."

The vulnerability of participatory approaches to inequities in *vertical* power relations, i.e. those between the local community and external institutions, and therefore manipulation by external agents for the benefit outside agendas (such as coopting threatening or uncooperative communities) is widely acknowledged (e.g. Tindall 1994, Chambers 1995, Nelson & Wright 1995, Collins 1997). Accordingly, many researchers go to great lengths to identify and resolve vertical power imbalances between themselves and the communities they are working with, by using various compensating procedures to ensure they behave transparently and self-critically, and treat local knowledge with equal or greater respect than 'expert' knowledge (Kapoor 2002, Chambers 1994). In the case of the Shark Bay project, this was done by treating government resource management agencies (CALM and Department of Fisheries) as stakeholders on equal footing with other local and external interests in the SBWHA. The input of these departments was garnered and handled the same way as the local community's, through one-on-one interviews and synthesis in the Delphi rounds, followed by targeted meetings to hammer out details for the interpretive plan. The researcher attempted to emphasise that the plan was not a CALM plan, but rather one that belonged to the whole of the community (including geographically external and internal players). CALM, for its part, was committed to relinquishing control of the planning process and adopting recommendations made by other participants. Unfortunately, because the researcher was an official CALM employee, and because she was situated in the CALM office, many locals remained understandably sceptical about her declared neutrality, a perception she battled throughout the project. The CALM manager noted this problem in his evaluation interview (**Appendix 11**), stating that "Your association with CALM was an issue, but you had nowhere else to work from...We need to have a physical separation between the agency and the planner." Despite this, the researcher was apparently somewhat convincing in iterating her neutrality, as the Aboriginal informant stated in the evaluation interviews that "it helped that you were new and non-biased in the area; it helped position yourself in the research by not being affiliated with any agency."

Participatory processes, however, have been increasingly challenged by those who argue that the legitimacy and justness of such processes is also compromised by *horizontal* power relations *within* local communities, that the 'valorisation of the local', contrary its aim, almost always reinforces existing inequalities and power relations in communities (Mohan 1999, Mohan & Stokke 2000, Buhler 2002, Kapoor 2002). It appears that researchers have often failed to acknowledge the role of power relations *within* local communities in preventing resource distribution to and empowerment of the poor and marginalised. This oversight has been common among development practitioners, who have tended to view of communities as homogenous, harmonious units, thereby masking the power relations within (Mohan 1999), and who have focused on consensus building. Cooke (2001) argues that group dynamics can result in the cooption of participation to meet other agendas, and reinforce the status quo by allowing process outcomes to be influenced and/or manipulated in favour of the most powerful individuals and groups. In fact, Kothari (2001) argues that the more public a participatory process is, the more likely it is that the power structure and differential needs of a community will be obscured. Similarly, Swanson (2001) points to the dangers of romanticising the 'local', observing that in addition to failing to direct resources to the poor and marginalised, the historic failures of local societies to protect civil liberties and the environment are direct evidence of the need to include extra-local agencies (such as state and federal government) in locality-based planning, for the purpose of setting legal and cultural standards for citizenship, quality of life, and quality of the environment.

In Shark Bay, cooption of the planning process by local horizontal power relations was prevented in three ways. Firstly, the concerns of externally-based interests were accommodated by including agencies such as CALM, World Heritage, the Department of Fisheries, non-government organisations (NGO's) and the Western Australian Museum as members of the Shark Bay community for the purposes of the study. Secondly, the influence of group dynamics on decision-making was avoided by using face-to-face interviews and the Delphi technique. Thirdly, face-to-face interviews improved community representation in the planning process: Wondolleck and Yaffee (2000) observe that informal 'one-on-one' talk with community members reaches out to people who don't normally attend meetings. Evaluative interviews (**Appendix 11**) conducted at the end of this project indicated that the respondents felt the local community and other relevant stakeholders were sufficiently represented in the communications objectives derived using the modified Delphi technique, with comments such as "[I am] impressed with the result—it represents the community, and there is nothing here I wouldn't agree with" from a locally-based tour operator, and "they are very much representative of the community—summed up very well" from a local government councillor. Another informant commented on the success of the Delphi process in averting group dynamics, observing that "It allowed powerful people to be silenced and put into perspective—they weren't able to overpower other people's opinions. It's resulted in a better overview of everyone's opinions. This is the first time this has been achieved, because at meetings, the powerful drag everyone with them." The Aboriginal informant similarly noted that "The approach you used has managed to engage all the stakeholders in the community."

Adequate representation by marginalised groups is demonstrated by comments from two Aboriginal community members, one stating that the 'Aboriginal community's views are well represented', and the other—also a commercial fisher—stating that "you've covered most people's thoughts in the objectives." One of the Aboriginal informants also noted

that the discussion document “gave minority groups input and empowerment in the process, and took some power away from the groups that normally hold all the power.” Generally, the evaluation participants also felt that their own thoughts and ideas were similarly reflected (Appendix 11).

Although there were a number of concerns about lack of political finesse (discussed in the next section), the comments from the informants in the evaluative interviews indicate that they felt the planning process was satisfactory and legitimate. The accommodation owner noted that the community “had ample opportunity to comment on what was written in our one-to-one interviews and in the successive documents. We were given plenty of feedback and opportunity to comment”. The Aboriginal informant also indicated that the process was legitimate by reporting that “You were sensitive and made sure you preserved our values ...We were happy with how you approached us and checked to make sure that information was correct.” Five of the seven informants indicated that there was no need to change the planning process; the others made little comment on the process itself, except those who expressed concern about the political handling of the discussion document.

Another reason for successful community representation in the Shark Bay project is that rather than try to achieve consensus on a small number of communications objectives, the researcher opted for a large and diverse number of objectives and key messages, which represented the different community segments (see Table 4.1 in Chapter 4). These objectives ranged from “increased awareness and appreciation of the reasons for Shark Bay’s World Heritage listing,” to “increased awareness and appreciation of Shark Bay’s Aboriginal culture and history,” and “reduced tourism impacts on the local community.” Key messages likewise represented diverse and sometimes conflicting stakeholder perspectives, such as “World Heritage listing has affected the local community in both positive and negative ways,” and “contemporary Shark Bay is a unique mix of Aboriginal, Malay, European and other cultures that arose from years of relative isolation.” A number of authors have noted that group work emphasising consensus-based approaches tends to silence marginal or dissident voices (Goebel 1998), and both hides and perpetuates power relations (Taylor 2001).

5.2.1.4 Identifying and sharing knowledge

At the start of the project, the researcher found that very few people (including CALM staff) had a clear understanding of why Shark Bay was a World Heritage area, and many were unaware of the scope and complexity of environmental issues facing the area. In addition, many stakeholders were lacking knowledge about the history, identity, aspirations and concerns of Shark Bay’s local people. No management plan was available for the whole of the SBWHA, and there was no centralised source of information about the area. Also, because of the high turn-over of CALM staff, corporate knowledge as to who the ‘repositories of knowledge’ were, both in the local community and in the wider scientific community, was lacking. As a result, the researcher was initially unable to discern who and what was important in the SBWHA, information that was clearly required for developing a legitimate, representative and locally relevant communications and interpretation plan for the SBWHA.

Seeking multiple perspectives from multiple sources of knowledge is particularly important when dealing with environmental issues. Allen and Kilvington (1999), in their

study on the involvement of people in environmental information management systems, argue that because environmental challenges are complex, they frequently defy simple solutions, and therefore can only be resolved using collaborative approaches that accommodate multiple perspectives and use multiple sources of information. Participatory approaches are widely espoused for their effectiveness at drawing out and sharing community knowledge (e.g. Wondolleck & Yaffee 2000, Allen 2001). The participatory approach used in the Shark Bay project proved an effective means of tapping into and merging knowledge pools—including biological, managerial, cultural, social and economic—from various sources. As noted in Section 4.4.3.2, the first round of 115 interviews also importantly revealed the social contexts in which various pools knowledge were embedded.

Snowden (2000, p.242), in his essay on the social ecology of knowledge management, notes that knowledge is both a 'thing' and a 'capability.' He argues that because 'things' are easier to manage, we have tended to focus on knowledge as a 'thing' that can be managed and distributed with technology, and "captured and codified into databases." More recently, he notes, knowledge has been defined in sociological terms as the human capability to act. For instance, he quotes Davenport and Prusak (1998), who describe knowledge as a "fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluation and incorporating new experiences and information." In order to tap the intellectual capital collectively held in the Shark Bay community, an understanding of who held what knowledge was required. Hence the first round of interviews were useful because they not only revealed knowledge (as a thing), but also who the keepers of that knowledge were, the keepers' associated values and politics (i.e. the knowledge context), and who the most appropriate individuals were for applying knowledge in different circumstances. In other words, two people might hold similar knowledge on a subject, but it may be politically astute to consult one over the other, based on the differential likelihood of the individuals influencing or obstructing a particular project as a result of their involvement or non-involvement. For example, in Shark Bay two rival scientists held competing views over an important topic; politically it was critical to carefully accommodate both scientists' views in any interpretation relating to their field of study, because they were both highly influential people in different realms of the Shark Bay community. This is relevant to Mitchell *et al.*'s (1997) discussions on stakeholder 'saliency', which acknowledge that the significance of an individual stakeholder in a given circumstance depends on the stakeholder's power to influence outcomes, the legitimacy of the individual's involvement, and the urgency associated with the individual's involvement. Because a stakeholder's saliency shifts with circumstance, Gardner (2001, p.8) notes that stakeholder theorists have long had problems devising practical guidance for determining "who or what really counts" (e.g. Freeman 1984).

As a result of identifying the community's key repositories of knowledge and influence (key informants) in the first round of interviews, the researcher was able to approach appropriate individuals in the second action research cycle, to gather more specific information about specific stories and places for interpretation, as well as information about land and infrastructure management, recreation and tourism, funding and support, and interpretive media and techniques. Approaching stakeholders for this information, rather than relying on external sources ensured the interpretive plan was based on information that was locally relevant, and that reflected the priorities, concerns, and

knowledge of those who live and work in the SBWHA. Goebel (1998, p.277) describes the situation where participation is used as a means to respect local knowledge on equal footing with scientific knowledge, as one where the researcher is viewed as a “facilitator of knowledge creation” and an interpreter of complex stories. In Shark Bay, the researcher ensured the knowledge ‘created’ through participation was shared equally among participants by compiling the gathered stories into a database (Appendix 9), and supplying the database to *all* project participants. She also ensured that the ‘context’ of such knowledge was considered in the interpretive plan (Appendix 8), by precisely identifying the stakeholders who should be involved in implementing each interpretive project. The interpretive plan contained a comprehensive stakeholder contact list, and it too was supplied to all the project participants.

Another important outcome of the project was that simply being involved in the communications planning process led to increased knowledge among stakeholder participants. Five of the nine stakeholders interviewed for the project evaluation (Appendix 11) reported increases in their own or community knowledge. For example, they noted that “people are now more aware of the place they live in,” and that being involved in the process has “raised people’s awareness through the consultation process.” Other comments were made in relation to having improved awareness and appreciation for World Heritage, most notably the CALM manager, who reported that: “it’s educated me—I have a far better appreciation for World Heritage” and “The results have been very positive—when I arrived, people’s view of World Heritage was zero to negative. Now that’s changing. People now have a much clearer idea of why Shark Bay is a World Heritage Area.” With respect to knowledge and appreciation about Aboriginal culture, the accommodation owner reported that “I’ve learned and become much more aware of Aboriginal culture...” Notably, the Aboriginal informant reported improved knowledge of his own culture, stating that “I learned more about Aboriginal culture by attending meetings and listening to elders’ stories and practices that I didn’t know about before. I’ve had to go back to school and relearn a lot about my culture, and certainly the language.” Additionally, the researcher observed some local community members repeating to others the knowledge they had gained through involvement in meetings and workshops. This phenomenon is similarly observed by Wondolleck and Yaffee (2000), who note that as information is exchanged in collaborative processes, it becomes part of a shared knowledge base that is ‘owned’ by all members of the collaborative group; as dialogue progresses between groups, a shared opinion begins to grow.

Thus, broad involvement of diverse stakeholders in the planning process not only helped the researcher tap into various knowledge pools and identify knowledge contexts, it also helped meet one of the main objectives of the communications plan *prior* to its implementation, that being to improve local people’s knowledge and appreciation of the SBWHA.

5.2.1.5 Stakeholder support and commitment

Stakeholder support for and commitment to the plan were demonstrated by comments made by community representatives and by community reaction. All nine of the informants in the evaluative interviews expressed general support for the plan (Appendix 11). Three of the evaluation informants, the scientist and the two local government councillors, were expected to provide negative feedback, because of their involvement in the reaction against the discussion document. However, their responses indicated that

they supported the plan, despite criticisms about the political handling of the discussion document. Their support was indicated in comments such as: "This plan will help because it gives us direction...everyone involved in the future interest of the SBWHA will have something to look and refer to," and "The document is extraordinary and detailed, and will be used for the purposes it was designed for. It's fairly user friendly and detailed enough to be used for future planning," and finally, "I think you have overall done a good job, which will be of benefit to the World Heritage Area."

Support was also expressed by the other evaluation interviewees. When asked about the usefulness of the plan, the accommodation owner noted that "If it is successfully implemented, we will have a happier community; this has to happen because these are our objectives, we decided on them." Similarly, the Aboriginal informant stated that: "From experience I've been happy, and reports from the Aboriginal community here and in Carnarvon show others are impressed with the work. You've lived up to expectations."

Importantly, *commitment* to plan implementation was expressed by the local government councillor. This is particularly significant because the cooperation of the Shire is integral to successful implementation the project, and because this councillor and other members of local government had at one stage been in strong opposition to the project. The councillor's commitment is demonstrated in these comments: "It is an extremely thorough plan. It is a blue print—as long as we stick to it—for us to follow. It's pretty important. The next step is to make sure council pushes it and sticks to it as with other agencies (eg. CALM)," and "The plan could be made statutory if the agencies accept it; e.g. by putting it on the Council policy agenda. The Council can breathe over CALM's shoulder and make sure they do it. Stuff gets done then shelved; it's very important that things like this are given protection and safeguarded as tools for the community's future." The Aboriginal informant likewise shows commitment to implementing the plan by saying: "we need to secure funding to implement the plan and engage the relevant indigenous Aboriginal organisations to assist with resourcing (funding and manpower) so they take ownership as well."

Commitment to plan implementation was also demonstrated by community reaction. At project completion, CALM, the local Shires, the Shark Bay Tourism Association, the regional development commission, the Shark Bay Chamber of Commerce and a community development funding agency expressed verbal commitment to signing-off and implementing the plan, and discussions were underway about possibilities for handing implementation over to either the regional development commission or the Chamber of Commerce, to ensure the project remained community-based.

Increased stakeholder ownership (e.g. Rahman 1993, Chambers 1997) and compliance (e.g. Davis 1996, Warburton 1998) are commonly acknowledged outcomes of participatory planning. For example, the role of participatory decision-making in achieving 'buy-in' to change processes is emphasised in Eden and Ackerman's (1998) discourse on strategy making. They argue that successful delivery of strategy is dependent on the inclusion of those who have the power to influence strategy implementation in the strategy-making process, and that stakeholders who are excluded from decision-making processes are unlikely to be motivated to implement changes or solutions (Eden & Ackerman, 1998). Allen (2001), in his thesis on collaborative environmental management, notes that resolving environmental issues requires social change, which relies on the

commitment of those involved in the change process, and which in turn is achieved when these people participate in the negotiation of issues. Luz (2000) similarly found that cooperation of all local interest groups in landscape planning leads to steady implementation of planning schemes. Kay and Alder (1999) also note that in coastal planning the community is more likely to participate in plan implementation if they have had a role in its production. The importance of local support and ownership is likewise reflected in the thoughts of one of the Shark Bay stakeholders, who noted in the first round of interviews (**Appendix 11**) that "State and federal agencies will not be able to operate effectively if they do not have local support" (p. 76).

The evidence above suggests that participation of stakeholders in the Shark Bay communications planning process led to community support and commitment to plan implementation. However, participation alone was not sufficient for achieving community buy-in. The negative reaction by local influential stakeholders, precipitated by the discussion document, held large sway over local community opinion towards the plan until the researcher conducted a salvage effort at the end of the project. Had the researcher not taken the time to strategically present the plan to various influential segments of the community, it is unlikely that there would have been much support for the plan; indeed, indifference, if not outright hostility, would likely have been more typical. That participation was effective in shaping a document which reflected stakeholder concerns and aspirations was, however, demonstrated by the fact that the community ultimately embraced the plan once they saw its final form. That a number of individuals were surprised at the planning result, for example, the tourism association, who were expecting a 'land grab' (see Section 4.5.3.3), and the local government councillor, who reported that "it's not what I expected to see, but seeing it laid out I can see the plan will be of benefit" (**Appendix 11**), indicates that the researcher had failed to effectively communicate the purpose and anticipated end-product of the planning exercise. This type of problem has been similarly observed by Luz (2000), who found that in many landscape planning cases, the view and language of planners was not understood by local stakeholders, and that the planners themselves were completely unaware that this was the case. His research indicated that poor communication between groups frequently hindered acceptance and implementation of planning projects (Luz 2000).

5.2.2 Transformative Outcomes

Although the researcher embarked on this project with only instrumental outcomes in mind, a number of transformative outcomes also resulted. Unfortunately, because these outcomes were not anticipated, the evaluation process was not designed to identify transformational effects in the informants, and thus there is only a small selection of comments related to these effects. Nonetheless, the unexpected emergence of transformative outcomes merits discussion, particularly in light of their relevance as precursors to the instrumental outcomes.

5.2.2.1 The importance of being heard and empowerment of marginalised groups

The potential for participation to empower local communities and marginalised groups has been long touted in the participatory development literature. Many authors see participation as tool for valuing local knowledge, and empowering local people such that they gain confidence needed to control agendas and make their own decisions, and thus progressively transform themselves and their environments (e.g. Friere 1970;

Rappaport 1987; Fals-Borda & Rahman 1991; Chambers 1994, 1995; Paige & Czuba 1997). Participatory action research in particular is premised on the assumption that "planning of a community should be by the community" (Baum 1998), and as such it validates each person's right to speak, regardless of status, gender, class, or race. Triantafyllou and Nielsen (2001, p.82), in their analysis of empowerment and participation techniques in Third World development, describe the most important effects of participatory development as being "the power-knowledge relations through which the capable, empowered subject is coming into being."

During the stakeholder evaluation interviews at the end of the project, informants were asked how they were affected by the planning process (Appendix 11). With the exception of the scientist, all the informants indicated that they somehow benefited from being involved in the planning process, and their answers to this question stressed the importance of *process* over *product*. Specifically, the interview results suggest that validation comes with being given the opportunity to speak one's mind, and that being *heard* is of vital importance to community members. Informants indicated that overall, local community members felt they had a 'say' in the decision-making. The CALM manager noted that "Just having someone to talk to has helped—people have had a chance to let off a bit of steam." The World Heritage informant similarly notes that "From the community perspective and the feedback I've had, they feel they've had a say in how things are going to work, rather than being imposed on." Similarly, the tour operator comments that "I got to have my say, and that's always good for a resident who may be affected. It's important for everybody to be able to have a say, and you've done that." These comments are consistent with theories in the development literature relating to the usefulness of participatory methods in freeing 'local people' from the "normative biases of non-locals" (Mohan & Stokke 2000, p. 252), i.e. outside experts.

Notions of empowerment in relation to the more marginalised segments of the community were expressed by the Aboriginal informant, who reported that the Aboriginal community has been "given a voice and empowered by contributing to the document," and that the process "gave us a voice, on behalf of most of the Yamaji mob: this hasn't happened before. It gave us a sense of power; in the past we haven't been included in the processes." Improved sense of identity and self-discovery were additional reported outcomes. The Aboriginal informant observed that "some of our members are now more familiar with Yamaji culture through this process," and that "I've learned more about me as an Aboriginal person...I'm more confident and comfortable with myself as an Aboriginal person, partly through this process. Hopefully it empowered others similarly." The Aboriginal informant further notes that: "With government policies, etc., a lot of our identity was suppressed, and we had to take on Malay identity: people started to believe that it was true. A lot of the women weren't up front about coming out with cultural information and sharing stories. We've had more come out in the last two years than the last 20—we need to share these stories with our kids...it exploded some of the myths...e.g. that we were all Malay, and there are no Aboriginals in Shark Bay."

Although the Aboriginal informant in this project clearly indicates feelings of empowerment as a result of the process, one cannot speculate as to whether or not these feelings correlate with increases in the real empowerment of the Aboriginal community. Parpart (2000) and other scholars (e.g. Kapoor 2002) have suggested that inequalities do not disappear simply by giving voice to marginalised groups, and argue that Chambers and

his proponents have too readily assumed that participation can “overcome deeply embedded material and cultural practices that legitimate and maintain social inequities” (Parpart 2000, p.8). Nonetheless, the feelings of self-revelation and empowerment reported by the Aboriginal informant are remarkable, and indicative of at least individual transformation, if not community transformation⁶. Chambers (1997) notes that transformative participation contributes to personal development by engaging people in a learning process which increases self confidence and enables them to better use their own resources. Likewise, the *Sense of Place Interpretive Planning Handbook* (Carter 1997) states that although participatory interpretive planning cannot directly resolve community issues such as unemployment, it can enhance collective ownership of the communities natural and cultural resources, and result in increased self-belief of the community in its ability to influence events in the future.

5.2.2.2 *Trust, understanding and building- social capital*

Yaffee and Wondolleck (2000) argue that humans form complex binding relationships, and that processes which build trust and mutual understanding help create preconditions that lead to collaboration between polarized groups. Putnam (1995) describes the active connections of trust, mutual understanding, and shared values and behaviours that bind members of human networks together and make cooperative action possible as *social capital*. More specifically, Pretty and Ward (2001), in their discussion on social capital and the environment, identify four central aspects of social capital: relations of trust; reciprocity and exchanges; common rules, norms and sanctions; and connectedness, networks and groups.

These aspects of social capital can bind like-minded people together into groups, build (horizontal) bridges between groups with different interests, and create (vertical) links between groups and institutions such as government and academia (Sparkes 2003). The presence of these connections facilitates cooperation by reducing the need for costly and repeated negotiation among network members every time they are faced with a new situation. The lubricating role of social capital and trust in particular is well described by one of the project evaluation informants: “They [the community] have to see that the person carrying out the project doesn’t have an agenda, then they can trust that person. Once there is trust, people will let you run with a project, and will be satisfied that you will do the right thing.”

The potential bonding outcomes of the project was touched on by one of the other informants who stated that the project “will hopefully engender a sense of ownership and pride in the community.” Some of the other comments made in the project evaluation interviews suggested the project helped build ‘bridges’ of *horizontal* understanding between different community groups, notably between portions of the non-aboriginal and the Aboriginal communities. The accommodation owner reported that as a consequence of being involved in the process “I’ve learned and become much more aware of Aboriginal culture and the strength of the local community’s opinions.” The Aboriginal informant had a number of comments in this respect, such as “We showed you an example of diversity in our own culture, and let other people know about our culture in the process—

⁶ Interestingly, transformative notions such as ‘empowerment’ were not considered or espoused by the researcher over the course of the project (her focus had been on instrumental outcomes), and as such her rhetoric was not the source of the Aboriginal informant’s musings on this topic.

this leads to acceptance,” and “I often felt isolated in terms of promoting Aboriginal culture, [but as a result of being involved in the process] I realized how passionate others are about Aboriginal culture.” The informant also observes that the project “has helped me understand Aboriginal issues in terms of how they exist and affect people in Shark Bay.” An indication of the status the Aboriginal informant perceived Aboriginal culture to have in the community before and after the project is suggested in this comment: “We have been ridiculed by our own and by non-aboriginal people. This has been a step in the process: by having a voice and providing input...It is comforting that people now recognize Yadagalah as a stakeholder in the region.”

The evaluative interviews also hinted at some improvement in understanding between the local community and CALM, thus improvements in vertical social linkages. The local councillor’s comment that “being involved in the process made me more aware of what we have, and the complications we will have if we don’t do something about it now [in terms of managing tourism]” suggests that he had come around to understanding some of CALM’s concerns about the environmental damage being caused by uncontrolled tourist access in some areas. The commercial fisher likewise noted that “Being involved made us aware that we can’t stop tourism, but we can control it.” Conversely, the CALM manager states that his views have changed through being involved in a participatory process, noting that “Yes my views have changed. I’ve realized how things can be done better in CALM from both a planning and interpretive perspective.” After the release of the discussion document, comments made to the researcher by some CALM staff indicated that the discussion document helped clarify their perceptions about local community concerns, and dispel some stereotypes about the community being unconcerned with environmental issues and World Heritage values. The Aboriginal informant also made reference to the reciprocal nature of vertical learning in the project by pointing out what the researcher—a CALM employee—had learned: “you’ve probably learnt that people not reacting doesn’t mean they’re not listening...And you learned lots about Malgana, Yingkarta and Nhanda culture.” This is consistent with post-modern notions of the praxis between participants and researchers, which leads to both parties becoming both the “changers and the changed” (Wallerstein 1999, p.43).

The project also helped increase internal and external connectedness and networks between various groups as the researcher pulled individuals from different organisations and community segments together to help devise the interpretive plan. In the evaluative interviews, the CALM manager observed: “the process of consultation and collaboration, for example the museum meeting, gave me a chance to meet others I wouldn’t have otherwise met. It opens the door for other things. It’s actually bigger than World Heritage because it will create partnerships and projects not related to World Heritage.” He also notes that “from a manager’s perspective it has been very positive. The gathering of people for a common cause hasn’t happened before.” Parkes and Panelli (2001, p. 103), in their investigation into the value of participatory action research in integrating community and ecosystem health, similarly note that the connections between groups and individuals created by PAR may importantly lead to a “sustainable web of connections-in and beyond the specific catchment.”

However, despite the association of social capital with positive concepts such as trust, networks and reciprocity, Mohan and Stokke (2000) argue that social capital—the ‘glue’ that binds communities—can also work against the best common interests of society, by

inhibiting activities which threaten the status quo. As such, social capital has the dual nature of being both essential to a participatory project's success, while at the same time posing one of its greatest dangers, a point clearly demonstrated in the Shark Bay project.

5.2.3 Power and Pitfalls

Participatory research is founded on the acceptance that power and knowledge are inextricably linked (Nelson & Wright 1995, Chambers 1997). More specifically, Kapoor (2002, p.114) observes that power is inherent in participatory development, that it "induces power and thereby transforms those (communities, institutions) who deploy it."

Because participatory planning is inextricably linked to power, it is open to abuse, both by external agencies who wish to coopt communities viewed as threatening or in need of persuasion, and by local socio-economic forces who wish to protect and reinforce local patterns of elite control. 'Abuses' of both orders applied to the Shark Bay project. On one side of the power struggle was a group of local influential stakeholders, protecting their interests in the community against outside non-representative control and interference. On the other side of the struggle were CALM and the researcher, representatives of external interests, who were working to deliberately sidestep the local powerbase, in order to quiet the vocal criticism and rhetoric of some influential stakeholders, and foster broad community participation in the planning process, with the aim of securing support for plan implementation. Eversole (2003, p.783), in her assessment of Australian development projects, argues that issues over who owns the project and who has input generate conflict between outside researchers and local people, and that this is exacerbated by locals' "fear of losing control to rival individuals or groups". In the case of this project, it can be argued that such control issues were the latent causes of the reaction which occurred as a result of the discussion document release.

The offending comments in the discussion document related to the political orientation and business interests of certain influential stakeholders in the local community. Although these comments constituted only a few lines in an 80 page document, and although CALM and the researcher did not consider them relevant to any of the planning decisions that would be later made and in fact felt they were insignificant in the context of the project, they were perceived to be extremely threatening to the individuals who precipitated the negative reaction. Because of the anonymity of the comments, and the confidentiality of the first round of interviews, the influential stakeholders were unable to identify or confront those who made the comments, and therefore repudiate the content of the remarks. Kapoor (2002, p.113) notes that while participation may facilitate local empowerment, it may also generate "surveillance and discipline" as participants monitor and normalise (through discipline) each other's behaviour. The employment of the Delphi technique in this project prevented the exercise of such discipline. This loss of 'control' elicited a furious response: the influential stakeholders launched a vigorous campaign against the legitimacy of the planning process and the credibility of the researcher, an event described in detail in Section 4.4.3.3.

Although the influential stakeholders eventually came around when they saw that their interests were served in the final interpretive plan, the perils of attempting to apply participatory techniques that circumvent existing power relations were clearly demonstrated. These perils are seldom identified or described in the participatory

literature. Four of the nine informants in the project's evaluation interviews made reference to researcher's lack of political finesse and the need for more cautious handling of politically and personally sensitive comments. Although the local government councillor who triggered the negative reaction to the discussion document stated in his evaluation interview that there wasn't a need to change the planning process and expressed satisfaction with the planning outcome generally, he qualified this with a number of comments demonstrating his concern about anonymous participatory processes being used to promote political or minority views. He states: "I always had a worry about people making confidential comments; it's OK as long as the interviewer knows whether the interviewee is using the interview to grind an axe. You need to be aware that some people aren't really genuine and their comments reflect a hidden agenda. The interviewer must try to eradicate those sorts of comments."⁷

He further states that "Minority views might be made even though their comments don't have community support. There's no harm putting this information in the report, but the information must be identified as not having the majority view... People should be able to say what they want, but if their comments are put into a public document, you have to be careful as to how their views are presented." The cautionary undertone of these comments is explained somewhat by Kothari (2001, p.146), who notes that uncovering the voices of the marginalised through participatory techniques can cause problems when the "knowledge produced challenges knowledge conventions." Sibley (1995) also observes that dissenting ideas which come from marginalised groups are more threatening to the establishment than those which come from within, and Goebel (1998) cites examples from Africa where conflict arose because self-help committees were seen as an imposition that infringed the power base of traditional leaders. A number of other authors have likewise suggested that entrenched social networks in communities can inhibit activities which are beneficial to the larger group when such actions threaten to disturb the status quo (Coleman 1990, Putnam 1995, Salamon *et al.* 1998, Swanson 2001).

A number of development practitioners and scholars argue that participatory methods should be used to overcome inequalities in community power relations. Thomas (2000) for example, notes that development management should use enabling and empowering participatory methods, such as participatory action research, as management interventions on behalf of the marginalized and relatively powerless. Likewise, Brinkerhoff and Coston (1999) recognize that development requires political intervention in the status quo. In this vein, the Aboriginal informant for the project evaluation observes that "the stakeholder discussion document took people out of their comfort zones—but it was clear that the information would be used for public consumption. It gave minority groups input and empowerment in the process, and took some power away from the groups that normally hold all the power." In this light, the influential stakeholders' attack on free expression of minority and contradictory views appears as an attempt to maintain the status quo and existing horizontal power relations in the community. However, the influential stakeholders' reaction was perhaps triggered in part because of another underlying factor, one tied to vertical power relations: the realisation that their control had been deliberately undermined by external agents with an outside agenda. Cooke and

⁷ Other examples of 'axe-grinding' in the discussion document were not remarked upon by local influential stakeholders, possibly because they mostly targeted CALM, who was the source of pages of criticism in the document. There was no comparable reaction in CALM as a result.

Kothari (2001, p.3), in their critique on participatory development, describe one of the tyrannies of participation as the 'tyranny of decision-making and control', whereby participatory facilitators override legitimate decision-making processes. In the case of Shark Bay, it is possible that local elected influential stakeholders 'caught a whiff' of this tyranny in the wind, and saw red as a result.

There are a number of scholars who argue that many participatory processes simply give the illusion of handing control over to local communities, whereas in actuality they are insidious methods of indirect control by external agents (Biolsi 1991, Henkel & Stirrat 2001, Taylor 2001, Cooke 2003). For instance, Cooke (2003) argues that participatory action research methods designed to achieve community buy-in to development projects are a form of cooption and indirect control that replicates the power relationships of colonial rule. Cooke (2003) and Biolsi (1991) both argue that action research was invented by John Collier (not Kurt Lewin, as is commonly believed), Commissioner of the US Bureau of Indian Affairs, and an advocate of indirect rule. They demonstrate that "achieving 'empowerment' through participation was at its very beginning, therefore, subject to the colonialist's asserted sovereign power; and the limited autonomy it granted was a means of maintaining that power" (Cooke 2003, p.47). Thus, the authors suggest, readjustments of power relations through participatory development are intended to sustain imperial power. Others, such as Henkel and Stirrat (2001) compare participation to a religious experience, suggesting that the notion of empowerment, rather than being liberating, is in actuality tantamount to subjection, with participatory methods working to mould individuals to take part in the modern sector of developing societies.

Similar arguments are made with respect to managerial participation. Cooke (2003, p.52) argues that "culturalist" forms of management, such as change management and action learning, are manipulations of employee values and beliefs to "engender psychological ownership" of the organisation's aims, and feelings of empowerment with respect to responsibility for achieving these aims. However, he argues, "Ownership is ever literal, and empowerment is permitted only in relation to micro levels of organizational process. Broader management goals remain given and immutable, the desire and strategies for 'ownership' are managerially impelled." The purpose of such management, therefore, is "cooption and control, not genuine empowerment" (Cooke 2003, p.52). Similarly, Taylor (2001) argues that participatory processes, whether in business or development, are mostly employed to placate those without power, while at the same time obscuring the true nature of power relations.

Triantafyllou and Nielson (2001), in their analysis of empowerment and participation, take a more balanced position. They conclude that while critique is required to counter the fervour with which many development practitioners apply participatory methods, the kinds of 'totalising' arguments made in the paragraphs above are also disagreeable because they discard all participatory practices as being tools of repression, without acknowledging the emergence of capable, empowered subjects through the participatory process.

The conflicting notions of power and participation discussed in this section demonstrate that participation is not intrinsically 'good' or 'bad.' Indeed, one's perception of whether a participatory process is good or bad is relative to one's position on the power matrix, and how that position is affected at any given time by the power changes wrought through the participatory process: change in status quo always creates both winners and losers. The

ethical subjectivity and uncertainty of participation is further reinforced by arguments suggesting that levels of participation and rigour in participatory methods are in fact subordinate to the personality and motivations of the researcher/facilitator in determining the success and legitimacy of a participatory process.

5.2.4 *The role of the facilitator/researcher*

Wondolleck and Yaffee (2000) note that successful collaboration is contingent on the guidance of good facilitators who can manage group dynamics and deal with power imbalances, conflict, and tough or otherwise problematic people. The authors suggest that these facilitators must also manage the process effectively, make people feel their points are listened to and respected, and ensure that all the issues are being covered (Wondolleck & Yaffee 2000). The CALM manager, in his evaluation of the Shark Bay project reflects this point in his observation that "the right person is critical...if we had hired someone else it might not have worked." The researcher had entered the project with a suite of facilitation skills acquired from previous work experience that required negotiation between polarised stakeholders, including Aboriginal groups.

The importance of the researcher/facilitator in participatory processes is further discussed by Kapoor (2002), who notes that participatory methods often contain no rules to govern participant's behaviour such that a wide range of community interests are represented and interactions between participants are free of coercion and intimidation by authority figures. He argues that because these rules are absent, the onus is on the facilitator to ensure free and fair representation by the community. However, this power exposes the facilitator to corruption, and means the *legitimacy of the process is dependent on the personality of the facilitator, as opposed to procedure* (Kapoor 2002). Forester (1989) has for instance analysed how information gained through participation can give planners the power to manipulate decision-making, set agendas, and shape perceptions.

Rowan (2000), in his discussion on research ethics, argues that participatory research is more demanding of the researcher than traditional research methods in that it requires a "developmental maturity" whereby the researcher has sufficient self-awareness and self-understanding to frame their own assumptions.⁸ Wallerstein (1999, p.43) notes that postmodern researchers who seek a "multiplicity of truths from marginalised voices" have tried to reduce the power imbalance between themselves and the community by establishing themselves as but one player in the process, and relinquishing their power in relation to the community's by identifying power imbalances at the outset. This relinquishment of the researcher's power to the community has been termed as 'handing over the stick' by Chambers (1994). Tindall's (1994, p.155) musings on this subject, however, serve as an important reality check:

It must be acknowledged that that the power imbalance between researcher and researched remains, despite the use of democratizing practices and the efforts of

⁸ Rowan (2000) also notes that when undertaking complex participatory inquiries, one must consider the "needs of the researcher for emotional support when getting so close to other people," and that the researcher may need a support group, a supervisor or co-counselling to survive. This was a point keenly felt by the researcher, who, because she had come to know and befriend so many in the community, suffered personal as well as professional repercussions in the negative reaction to the discussion document.

the researcher to disown and shrug off the role of expert. It is the researcher who is firmly positioned by participants as knowledgeable, who sets the process in motion, who decides on the initial research issue, which frameworks to use, which prospective participants to contact and what happens to the final product. In the final analysis it is the researcher's version of reality that is given public visibility. It is not possible to achieve complete mutuality and equality.

That project participants felt the Shark Bay planning process was fair and legitimate was probably less to do with the selection of procedures, and more to do with personal commitment of the researcher, who, despite having instrumental motives, was dedicated to the principle that those who live, work, and manage resources in Shark Bay should have equal say in communications and interpretive planning for the area, and thus determining how Shark Bay is presented to the outside world. As such, the researcher worked hard to ensure that the community's diverse interests were represented. Lauber and Knut (1998) suggest that the appropriateness of participatory processes is dependent more on 'how' a participatory technique is wielded than the choice of technique itself, which Buchy and Race (2001) suggest depends as much on the attitudes and behaviours of the researcher, as it does on resources and processes.

The assertion that the legitimacy of participatory processes cannot be assured through method and procedures, and is therefore is dependent on the motives and personality of the facilitator, leads to the findings of Hailey (2001), in his study on successful South Asian NGOs. He found that it is not participation per se, but rather sustained, highly personalised interactions that have led to the success of these organisations: formulaic, structured approaches to participation were not used by successful NGOs. He suggests that the success of these groups is tied to their understanding and response to the needs of local communities, achieved through the building of close personal relationships with community members over long periods of time, and the creation of bonds of trust between key staff and the communities with whom they work. The evidence in Hailey's (2001, p.95) case studies shows that key decision-makers "work alongside local farmers, care for families, walk and talk with villagers, listen and learn," and that their relationships are rooted in the decision-maker's genuine commitment to helping the disadvantaged.

Hailey found that one of the reasons that participatory approaches were not used by these NGOs was the perception that participatory methods are a means of imposing outside control. In the case of the Shark Bay project, a combination of formulaic participation and informal interaction was used in consulting the local community, which may account for the mixed success of the project. The Delphi rounds were a formulaic approach to participation, and indeed they were responsible for eliciting the negative reaction by local influential stakeholders. Although a large number of benefits were derived through the process despite the reaction, these benefits may not have surfaced had the first question round not consisted of informal, personalised interviews (typical Delphi rounds consist of mailed out questionnaires, not interviews). In any event, the project would likely have failed to garner community support if the researcher had not undertaken a personal mission—involving more face-to-face engagement with key stakeholders—to salvage it from the quagmire created by the negative reaction to the discussion document.

In the project evaluation interviews, the CALM manager reflects Hailey's (2001) comments on the importance of informal relations by stating that: "The informal

approach to consultation seemed to work. It's important to approach people on neutral turf, not in the office. See people on their own patch, it puts them at ease." He also remarks on the need for flexibility (which is not inherent in formulaic approaches to participation), observing that it is best to "deal with people to suit where they are in the system and recognise that different people should be dealt with differently." He further reflects Hailey's findings in noting that agency staff need "...a better understanding of the politics in town in a micro and macro scale; need to know who is who and the different entities they represent. This project proves we need people on a salary, based locally. We can't bring in contractors on short term— they don't know the politics and you need to know everything to work here. Staff have to live in town: its 24 hours seven days a week, you are always working." These observations buck growing trends in government to outsource work to external contractors.

Huberman (1991) discusses the types of researcher-community relationships that impede collaboration. Huberman (1991) described these as: 'hello-goodbye', where researchers and communities meet and work together then part; 'two planets', where the two groups have little contact with each other; and 'stand-off', where there is resentment and few point of agreement between the two (Huberman 1991). In the case of Shark Bay, the researcher lived and collaborated with the community for eighteen months while preparing a communications and interpretation plan for the World Heritage area. However, on completion of the plan, she left the community, and although there were intentions to hire another coordinator to implement the plan, the funds to do so would not be available for another six months. Once hired, the new coordinator will be faced with having to refresh the community's awareness and interest in the plan, having to start at square one in establishing a network of relations and trust with community members, and having to deal with new politics and issues that have arisen between CALM and the local community in the intervening time period. Wondolleck and Yaffee (2000) relay a number of examples where collaborative projects have folded in absence of a coordinator, and in the case of Shark Bay the loss of the researcher at the point of plan completion clearly jeopardises the effectiveness of its implementation.

5.2.5 *Levels of Participation and Transformative versus Instrumental Motives*

5.2.5.1 *Level of Stakeholder Participation*

Authors such as Tandon (1988) and McTaggart (1997) argue that in order for a research process to be genuinely participative, the people of the community must have control over the *whole* process. McTaggart (1997), however, notes that the idea of *participation*—meaning to share or take part in—is problematic because it is often confused with *involvement*—meaning "entanglement or implication". McTaggart (1997) argues that while *participation* implies ownership over the research process, *involvement* is open to exploitation and manipulation. Tandon (1988) suggests that for research to be genuinely participative, the people must have control over the whole process, including:

- a role in setting the inquiry agenda;
- participation in collecting and analysing data; and
- control over how research outcomes are used.

Participatory action research implies research undertaken *by* people, not *on* people; otherwise the research simply reinforces the implementation of institutional policy (McTaggart, 1997).

Other authors (e.g. Cornwall 1995, Pretty *et al.* 1995, Martin 1996, Parks and Panelli 2001) acknowledge that there are different levels of participation in participatory research. They describe the relations between the researcher and the community as a continuum, based on degrees of participation and partnership afforded to the community being studied, ranging from cooption to collective action. These relations are depicted in Table 5.1.

Table 5.1. Types of participatory research (source: Parks and Panelli 2001; after Cornwall 1995, Pretty *et al.* 1995, Martin 1996).

Mode of Participation	Involvement of local people	Relationship of research to people
Cooption	Token representatives chosen, but no real input or power sharing	On
Compliance	Tasks assigned with incentives, but outsiders decide the agenda and direct the actions	For
Consultation	Local opinions are sought but outsiders analyse and decide on the best course of action	For/with
Cooperation	Local people work together with outsiders to determine priorities but responsibility remains with outsiders for directing the process	With
Co-learning	Local people and outsiders share their knowledge to create new understandings and they work together to form action plans with outside facilitation	With/by
Collective action	Local people set their own agenda and mobilise to carry it out in the absence of outside initiators, and with or without outside facilitators	By

According to these definitions, the levels of participation in the Shark Bay project wavered between *consultation*, *cooperation* and *co-learning*. The *collective action* level of participation was not reached, because despite the World Heritage Community Consultative Committee reviewing and approving the proposal for this project, in reality the local community did not have a role in establishing the initial parameters, objectives, and hiring (i.e., the agenda) for the project, and therefore did not have true control of the process. In addition, there was no budget to hire people from the local community to assist with the actual research process of data collection, documentation, and analysis. Perhaps if the informants for the evaluation interviews (Appendix 11) had been aware of the potential level of empowerment of they could have had, they would not have expressed such high levels of satisfaction with the planning process.

Despite the lack of true collective action, the project evolved in a relatively organic fashion, and its direction was largely influenced by ongoing stakeholder input. Procedures for engaging the community were undefined at the project inception, beyond the advisory team's decision to begin meeting with stakeholders individually as opposed to in large groups. The advisory team also made a preliminary list of stakeholders, but this was changed and added to on the recommendations of successive interviewed stakeholders. Once the project had started, the advisory team disbanded and never met again. Subsequent decisions on how input would be gathered from stakeholders were largely decided by the researcher based on recommendations made by stakeholders; as such, the community did dictate the terms of its participation in many cases, particularly the Aboriginal community.

Levels of community participation varied at different stages of the project. Attempts were made within the limitations of the project to engage the community in decision-making

wherever possible; however, strategic decisions were made as to who and how stakeholders were engaged at the various stages, balancing the desire for open participation by all community members with pragmatic concerns about budgetary and time constraints (achieving large-scale participation is time consuming, unwieldy and therefore costly), as well as varying community interest in the different aspects of the project. Consideration was also required as to meaningful ways of engaging the community which minimised their own expenditure of time and energy, and made it easy for them to participate (one of the complaints issuing from the community is that they are over-consulted—which especially frustrates some people, as they often feel their input is ignored in the final outcome). Buchy and Race (2000), in their analysis of community participation in natural resource management in Australia, note that typologies such as those outlined in Table 5.1, assume that higher levels of community involvement are ‘good’, and lower levels are ‘bad’. In reality, they argue, greater participation does not necessarily lead to more sustainable resource management because: other outside factors (eg. global markets) may have greater influence on resources than the local community, participation may simply result in the buying-off of the local community, or community members may choose to not be involved because of high political risk or low personal returns (Buchy & Race 2000). They also observe that examples of collective action and full community control over participatory processes are rare.

Yaffee and Wondolleck (2000) note that an essential component of successful collaboration is the devolution of legitimate decision-making authority to stakeholder groups; they cite examples of where stakeholder satisfaction with participatory planning is linked to the level of their decision-making ‘authority’. They note such legitimacy is often lacking in traditional ‘public participation’ approaches. Despite the community not having full control over the Shark Bay project, the positive instrumental outcomes of the project, and the satisfaction stakeholders expressed in regard to the process and being able to have ‘a say’, indicate that the community felt this was a legitimate participatory exercise, and that they had had sufficient decision-making authority.

5.2.5.2 *Instrumental versus transformative motives*

The Shark Bay project was initiated with only instrumental outcomes in mind. At the project outset, CALM and the researcher agreed to a participatory approach with the aims of: increasing community support and commitment to the implementation of the plan; building bridges between CALM and the local community; and quickly tapping into a pool of local, scientific, and managerial knowledge. Some authors (e.g. Henkel & Stirrat 2001, Taylor 2001, Cooke 2003) present arguments suggesting that instrumental intentions in participatory projects preclude the possibility of transformative outcomes. Other authors (e.g. Tandon 1988, McTaggart 1997) suggest true participation and transformation can only be achieved when the community initiates and has full control over the project. Nonetheless, a number of transformative outcomes emerged unexpectedly in the Shark Bay project, as described in the previous section.

It is important to draw connections between the instrumental and transformative outcomes of this project, and note that they did not arise independently. *Common values*, the community’s opinions, and ‘emotional toxic waste’ were revealed in the discussion document as a result of community members feeling *empowered* to speak their minds. Stakeholders were satisfied with the plan and felt the process was *legitimate* because their opinions were valued, and because all stakeholder groups were given the opportunity to

have a voice. As a result of hearing differing community opinions, it was possible to incorporate diverse stakeholder interests in the communications and interpretive plans, therefore demonstrating *reciprocity*. Trust was created when people saw the process as legitimate and reciprocal, and when they saw that they had real influence in decision-making (*empowerment*). Trust made individuals comfortable with revealing and sharing their *knowledge*, which led to group learning and *mutual understanding*. Locally relevant mechanisms for cooperative implementation were developed through *networks* of connections between stakeholders created during the planning process. Ultimately, support and commitment to plan implementation—the primary instrumental objective at the outset of the project—were achieved by empowering the local community and building on social capital elements of trust, reciprocity, common values, and connectedness.

This line of reasoning implies that beneficial outcomes of participation are not the consequence of application of rigorous and structured participatory methods: they are the result of personal contact and engagement, and the bonds of trust these create. Hailey (2001, p.100) suggests that there should be more research into “the role of informal personal relations in local decision-making processes,” and emphasises that “*personal dialogue, conversation and discussion are crucial to the success of shared decision-making. Because personal relationships are based on some degree of mutual affection, trust and friendship, participation should not be reduced to formulaic processes, but rather based in a “dynamic relationship of mutual respect and trust.”*”

5.3 Implications for Interpretive Planning

The outcomes described above have a number of implications with respect to interpretive planning, in particular the effectiveness of participatory interpretive planning as a legitimate and ethical means of generating multiple narratives, and the potential for participatory interpretive planning to generate double loop learning and real behavioural change among stakeholders.

5.3.1 *An ethical basis for generating multiple narratives*

Traditional interpretive planning for parks usually operates within a Western scientific and positivist paradigm. This type of interpretive planning assumes that intrinsic knowledge resides within the natural object or place being displayed, thereby implying a singular, ‘correct’ meaning for that place or object, typically informed by natural sciences (Staiff & Bushell 2002). Wallerstein (1999), however, comments that postmodern science rejects the positivist notions of value-free science, researcher objectivity and authoritative knowledge. Other authors such as Rappaport (1995) and Robertson *et al.* (2000) describe the new paradigm of research as one which uses narratives and stories to acknowledge a multiplicity of truths from marginalised voices.

Staiff and Bushell (2002), in their analysis of interpretation in national parks, argue that the ‘fundamental issue’ facing interpretation in national parks is the epistemology of interpretive content, given contemporary challenges to science-based, Western thinking, and the relevance of protected areas to multiple communities. They suggest that landscapes and objects possess multiple meanings—indigenous, historic, scientific, recreational or aesthetic—which are dependent on perspective of the viewer. Similarly, Byrne *et al.* (2001) note that landscapes can be important to many different people for many different reasons. Crang (1998), in his text on cultural geography, describes

landscape as being inscribed by culture, a record of changing cultural values, practices and knowledges, shaped by and shaping the people living there.

As discussed in Section 2.3.2, interpretive professionals are increasingly recognising the need to exchange positivist, science-based approaches to interpretation for 'multiple narrative' approaches that accommodate the variety of cultural meanings that landscapes possess (Hall & McArthur 1996, Crang 1998, NPWS 1998, Staiff and Bushell 2002). McArthur (1998), for instance, suggests that typical problems with interpretive content in ecotourism include "a preference to address natural rather than cultural values" and "reluctance to present cultural heritage as a living entity." He recommends the broadening of interpretive content to present a range of perspectives on a topic. Similarly, Byrne *et al.* (2001) have recommended that the NSW National Parks and Wildlife Service place more emphasis on post-settlement Aboriginal culture and heritage, while also recognising the attachment of non-Aboriginal communities to landscapes. *Visions of the New Millennium* (NPWS 1998), a report outlining a new role for national parks in New South Wales, also argues that national parks must extend their science-based focus to include community participation and stewardship, and Aboriginal, European and Asian heritage.

Staiff and Bushell (2002, p.106) identified four fundamental questions that address the issue of multiple meanings in landscapes and the need for multiple narratives in the interpretation of landscapes:

1. Who 'owns' the landscape?
2. How are the landscapes represented or displayed?
3. Who speaks for the landscapes and what is spoken?
4. Who is looking at the landscapes and who is listening to the speaking?

However, attempting to identify and employ 'just' processes for answering these four questions and creating multiple narratives can present significant complications. Leader-Elliott (2003), notes that interpretation professionals are not neutral: they bring to their work their own cultural and political perspectives. Interpretation is highly subjective, involving decisions about significance and meanings of places, objects and culture, and what aspects of these are to be conveyed, by whom and to whom (Leader-Elliott 2003). On a similar note to Staiff and Bushell (2002), Leader-Elliott points out that this subjectivity raises ethical questions about who owns the material or heritage to be interpreted, who identifies what is to be interpreted, whose voices should be heard, and who has the right to speak.

The following presents a summary of *Ethics in Interpretation: an Australian Perspective*, a paper presented by Leader-Elliott (2003) for the Fifth World Archaeological Congress.

Leader-Elliott describes the traditional approach to Australian history as focusing on the accomplishments of white male settlers, governments, enterprise, and colonization in general, with Aboriginal history most often presented in its pre-settlement form and little or no attention paid to contemporary Aboriginal culture. This narrow interpretation of history can be described as *grand narrative* (Lyotard 1979).

Since the 1970s, Australian museums have shifted to pluralistic, socially-inclusive approaches to their interpretation of history, where "multiple narratives may be told by people from a diversity of backgrounds" (Szekeres 1995 cited in Leader-Elliott 2003),

helping to achieve a sense of place and local identity (Winkworth 1994 cited in Leader-Elliott 2003). Carol Scott (2003 cited in Leader-Elliott 2003), national President of Museums Australia, makes the case that: "It is imperative that the multiple voices of a nation's population, including marginalized and minority voices, are given the right to be heard...When multiple voices are allowed, existing stereotypes are challenged and unfinished social business is aired."

Ethical considerations with respect to how we interpret our history are of vital importance. Viv Szekeres (2000 cited in Leader-Elliott 2003), Director of South Australia's Migration Museum, notes that people tend to view museums as 'monuments of truth', and as such:

When visitors enter a museum, large or small, they tend to accept without question the story or the version of the story presented to them. So when our State Museum presents Aboriginal culture largely as a dead culture through an anthropological view of indigenous artefacts, very few people will stop and question this approach. When a regional museum presents only the stories of the local European families who were the first settlers as being the only stories worth hearing from that region, few will ask what happened after the nineteenth century or where did all the Aboriginal people go.

Clearly then, interpretation has the power to deny or affirm people's realities. It has the power to influence what people believe about culture and history and their place in the world. As a consequence of this power, political agendas often attempt to influence the way history, culture and places are interpreted. For example, the shift away from 'grand narrative' to pluralistic history has come under attack by critics who accuse some Australian museums of political correctness and cultural propaganda (Morgan 2001 cited in Leader-Elliott 2003). These critics often represent conservative elements in Australian society, among them being Keith Windschuttle, a vocal 'debunker' of Aboriginal massacres perpetrated by white settlers, whose hostile opposition towards pluralistic interpretations of Australian history and "contempt for social or 'peoples' history" is in keeping with his conservative stance on Aboriginal-white relations (Morgan 2002). In particular, Windschuttle (2001) identifies "women, ethnics and indigenes" as the beneficiaries of politically correct history, whereas "dead white males", especially those once in positions of authority, are excluded. Davison (2002 cited in Leader-Elliott, 2003) notes that many of the critics of pluralistic histories are closely linked to Australia's conservative government; a government he believes is intent on a historical revisionism tied in to its positions on Aboriginal reconciliation, native title, and the stolen generation.

In summary, according to Leader-Elliott (2003) interpretation must

...actively involve the communities whose cultures and places are interpreted. Interpreters need to respect and listen to those whose lives and pasts are interpreted. They need to involve them in the dialogue about what should be interpreted, how it should be interpreted and whose voices should be heard in the storytelling.

The Shark Bay interpretive planning model is consistent with Leader-Elliott's concerns in that it shifts away from the visitor satisfaction emphasis typical of interpretive planning for

parks and protected areas based on the US model (where people except for visitors are excluded—see Section 2.3.2), and focuses instead on engaging the community in creating multiple narratives to describe the landscape. It demonstrates how participatory interpretative planning can be used to help meet the strategic goals of a corporate body (e.g. CALM), while equally meeting the aspirations and social and economic needs of the total community whose place is being interpreted. This is more typical of interpretive plans based on the UK model, where countryside is preserved without excluding human endeavour (see Section 2.3.2). A participatory approach to interpretive planning is particularly relevant when interpreting areas that encompass multiple tenures and land uses, such as World Heritage properties and UK countryside, and hence often have more varied contemporary meaning and importance to a diverse group of stakeholders.

Most importantly, however, the Shark Bay interpretive planning model shows that community participation can be used as a *legitimate* tool for developing multiple narratives to describe 'place', and for ensuring that the voices of marginalised and minority groups are adequately represented. That the planning process used was perceived by stakeholders to be fair, representative, empowering, and beneficial to the whole community indicates that the process was a legitimate, democratic, and ethical means of generating multiple narratives for interpretation. It also demonstrates that the process was effective at engaging a polarised and disenfranchised community.

This approach also transcends the mythology of wild, pristine spaces, free from human influence, by acknowledging and valuing historic and contemporary human occupation and endeavour in these areas. This in turn can help stop the cycle of alienation and hostility in local communities affected by conservation designations such as World Heritage, and in the long run contribute to the well-being of the affected ecosystem, as well as that of the human communities who live, work and recreate there.

5.3.2 Double-loop learning and behavioural change

One of the primary aims of interpretation in parks and protected areas is managing visitor activity for improved protection of natural and cultural resources. However, in his assessment of interpretation programs for 'ecotourists', Orams (1996) argues that despite increasing support and institutionalization of interpretation into park management, there is little empirical evidence assessing the effectiveness of interpretation in generating behavioural change. He notes that research indicates that providing individuals with information does not on its own lead to changes in behaviour (Fishbein & Ajzen 1975, Orams 1994 cited in Orams 1996). Rather, Orams (1996) argues that theory related to education and learning indicates that learning occurs best under conditions of cognitive dissonance (Festinger 1957), whereby a person is provided with new information that makes them psychologically uncomfortable, or throws them off balance. The resultant psychological tension motivates the person to change his or her beliefs to be consonant with the new information. According to Festinger's theory, dissonance is produced by four types of situations: disagreement with others, forced compliance, decision-making and exposure to dissonant information. Notably, these types of situations are created by participatory processes, among others. Orams also notes that the literature demonstrates that the affective domains of emotions and values, in addition to knowledge or cognition, change behaviour (Dewey 1933, Eiss & Harbeck 1969; Iozzi 1989). This thinking is consistent with Argyris' action science theory (1983, 1985), which suggests that learning that fails to change an individual's or organisation's beliefs and assumptions is unlikely to

result in behavioural change. This type of learning, where underlying values remain unchanged, is known as single-loop learning. Double-loop learning occurs when underlying values are changed.

That the Shark Bay interpretive planning model produced some transformative effects in participants (empowerment and growth of social capital), suggests that participatory interpretive planning could potentially contribute to double-loop learning, whereby people's governing assumptions and values are changed (Argyris 1983), leading to greater likelihood of real behavioural changes among participants and key stakeholders. Allen (2001) notes that double loop approaches are critical to changing people's actions with respect to the environment. He also suggests that while information is important, learning that results in change will only occur if information is supported by social capital (Allen 2001). Behavioural changes resulting from the transformative effects of participatory interpretive planning were not assessed in this study, and this is an area requiring further research.

5.4 Implications for environmental management

The 20th century discoveries which led to the formulation of quantum and chaos theories exploded the positivist and essentialist foundations of modern science, by demonstrating that ultimate reality is both indescribable and unapproachable, i.e. it is uncertain, and that through the act of observing, the observer becomes part of the observed system and cannot be external or neutral (see Heisenberg 1930, and Capra 1997). Environmental science, however, has failed to accommodate these advances (Mainzer 1996), and remains largely focused on seeking positivist and reductionist solutions to complex environmental problems (Meppem & Bourke 1999; Wallace *et al.* 1996). In addition, the complexity of environmental problems challenges the notion that they can be resolved by 'sound science' abstracted from the social realities within which these problems are embedded. Hard, objective scientific facts, based on controlled experimental procedures, are best suited for describing simple or simplified systems; they are scarcely available for environmental policy-making, which instead relies largely on 'soft' facts characterised by uncertainty, value loading and subjective interpretations. As such, "invoking 'truth' as the goal of science is a diversion" (Ravetz 2004). Ravetz (2004) argues that environmental problems are "not merely complicated; they involve subsystems at a variety of scale levels, and there is no single privileged point of view for their measurement and analysis. The phenomena of life, society, and now the environment, cannot be captured, nor their problems managed, by sciences which assume that the relevant systems are simple" (Ravetz 2004).

The acknowledgement that environmental problems cannot be abstracted from their social contexts—as they are both caused and resolved by human action—has led many to the conclusion that environmental management can no longer look primarily to traditional science for solutions. Instead its focus must shift to the social context of these issues and search for social solutions more so than the expert-driven, technical solutions which so often fail when translated to policy because they lack broad social consensus and support.⁹

⁹ This emphasis on the interdependence of the wellbeing of humans and their environments, and the importance of incorporating communities and societal values in environmental decision-making, is consistent with the concept of ecosystem health, as defined by Rapport *et al.* (1998).

Allen and Kilvington (1999), for example, state that complex environmental problems can only be resolved by integrating multiple perspectives and sources of information using collaborative approaches. Collaborative decision-making, consensus building and other participatory processes are in essence formalised communication. Fazio and Gilbert (1986), for example, suggest that 90% of all resource management is communication—managing the people, rather than the resource. This emphasis on participation and communication among diverse stakeholders or ‘extended peer communities’ (Ravetz 2004) as a means of invoking plural and legitimate knowledges and perspectives as a way of dealing with the subjectiveness and uncertainty of complex science-related issues, is formulated in Funtowicz and Ravetz’s (1992, 1993, 1994) and Ravetz’s (1999) notion of *post-normal science*. Parallel to the notion of post-normal science is the *transdisciplinary approach* to sustainability defined by Meppem and Bourke (1999), and informed by communications planning theory, ecological economics, critical theory, and postmodern philosophy. Meppem and Bourke (1999) note that attempts to rely on ‘technofix’ approaches to environmental problems, despite the confusion fostered by multiple and contradictory interpretations of science and notions of sustainability, have resulted in an ‘impotent politics’, ineffective environmental policy, and an inoperable concept of sustainability. They argue that attempts to resolve the global environmental crisis, as initiated by the Brundtland Commission (WCED 1987), are being hindered by heated debate among conflicting groups (environmentalists, scientists, economists) as they compete to devise a universal, instrumentally rational definition of sustainability. This attempt to define sustainability in positivistic sense will not succeed, as the ‘abstract certainties’ relied upon by disciplinary approaches are mythical, and consensus among competing disciplines impossible (Meppem & Bourke 1999).

Sustainability, Meppem and Bourke (1999) argue, simply represents the ‘contested ground’ between environmental, economic and other interests. They suggest the notion of *transdisciplinary sustainability* as an alternative, one that is context dependent and defined through participatory processes whereby representative community stakeholders negotiate a position on the contested ground between environmental and economic interests to generate a reflexive conception of sustainability. Sustainability in this sense reflects the multiplicity of social values, knowledges and interests embedded in the particular community affected by the policy-making. Thus transdisciplinary sustainability views ‘meanings’ (of concepts such as sustainability) as highly negotiable, value-laden and context dependent. It requires a communicative planning approach which focuses on social relations and using discourse to uncover the values underpinning various arguments. In contrast, instrumentally rational disciplinary-based planning approaches focus on cause and effect, and finding *means* to achieve *ends*. The instrumental paradigm, however, assumes that there is an objective reality and that problems can be resolved by revealing *truths* using positivistic techniques (Meppem & Bourke 1999).

The need for such a transdisciplinary approach reverberates in the work of Allen (2001), who observes that “Natural resource management issues are not characterised so much by problems for which an answer must be found, but rather by issues which need to be resolved and will inevitably require one or more of the parties to change their views. However, effective social change requires the commitment and understanding of those involved in the change process” (Allen 2001, p. 3.10). Yet as Hajer (1995) argues, environmental policy making often neglects the entire agenda of social change which parallels the process of defining environmental problems. Despite the demonstrated

importance of social capital in facilitating the collaboration and social change necessary for resolving environmental issues¹⁰ (Yaffee & Wondolleck 2000, Allen 2001, Pretty & Ward 2001, Sparkes 2003), its role in environmental management planning has often been similarly ignored. With particular reference to coastal planning, Kay and Alder (1999) note that the social dimension is often an afterthought, with emphasis placed instead on the more easily dealt with technical and scientific aspects.

The implications of neglecting social capital considerations in environmental planning are illustrated Figure 5.1, which outlines a conventional, non-participatory planning approach to environmental management, focusing on protected area establishment, and the effects of such a planning process on social capital, and thus the efficacy of environmental management initiatives. The various steps in the planning process fail to generate the social capital needed to effectively implement environmental management recommendations produced by the planning exercise, and in fact actually create 'negative' social capital, or 'emotional toxic waste' (Luz 2000) by inciting resentment and anger among community members, such that: environmental issues remain fraught with contention, environmentally damaging behaviours are not halted, and support for conservation is not fostered. The perils of such 'top-down' management approaches are similar, noted by Kay and Alder (1999), who suggest that government agencies attempting to impose their ideas on those affected by policy-making can often do more harm than good.

This study has demonstrated that participatory communications/interpretive planning can be used as an intervention to create and repair social capital when relationships between management agencies and local communities have been damaged by past environmental planning exercises and the establishment of protected areas. In light of the outcomes of this and other participatory studies, a reconfiguration in the environmental planning cycle defined in Figure 5.1 is proposed for consideration. Figure 5.2 presents an alternative to conventional planning models where interpretive/communications planning is focused at the end of the planning cycle. In this proposed case, a participatory communications and interpretive planning exercise, such as that used for this study, is initiated at the *start* of the planning cycle, prior to undertaking other aspects of environmental management planning. Figure 5.2 illustrates how this approach fosters the creation of social capital in the affected community—in the form of trust, mutual understanding, reciprocity, common values and networks of connections—before the management agency attempts to engage

¹⁰ Pretty and Ward (2001), in their discussion on social capital and the environment, report that catchment management programs focusing on 'micro-catchments' not more than several hundred hectares in size, where the people all *know and trust each other*, have had 'extraordinary' uptake and success.

CONVENTIONAL NON-PARTICIPATORY PLANNING CYCLE

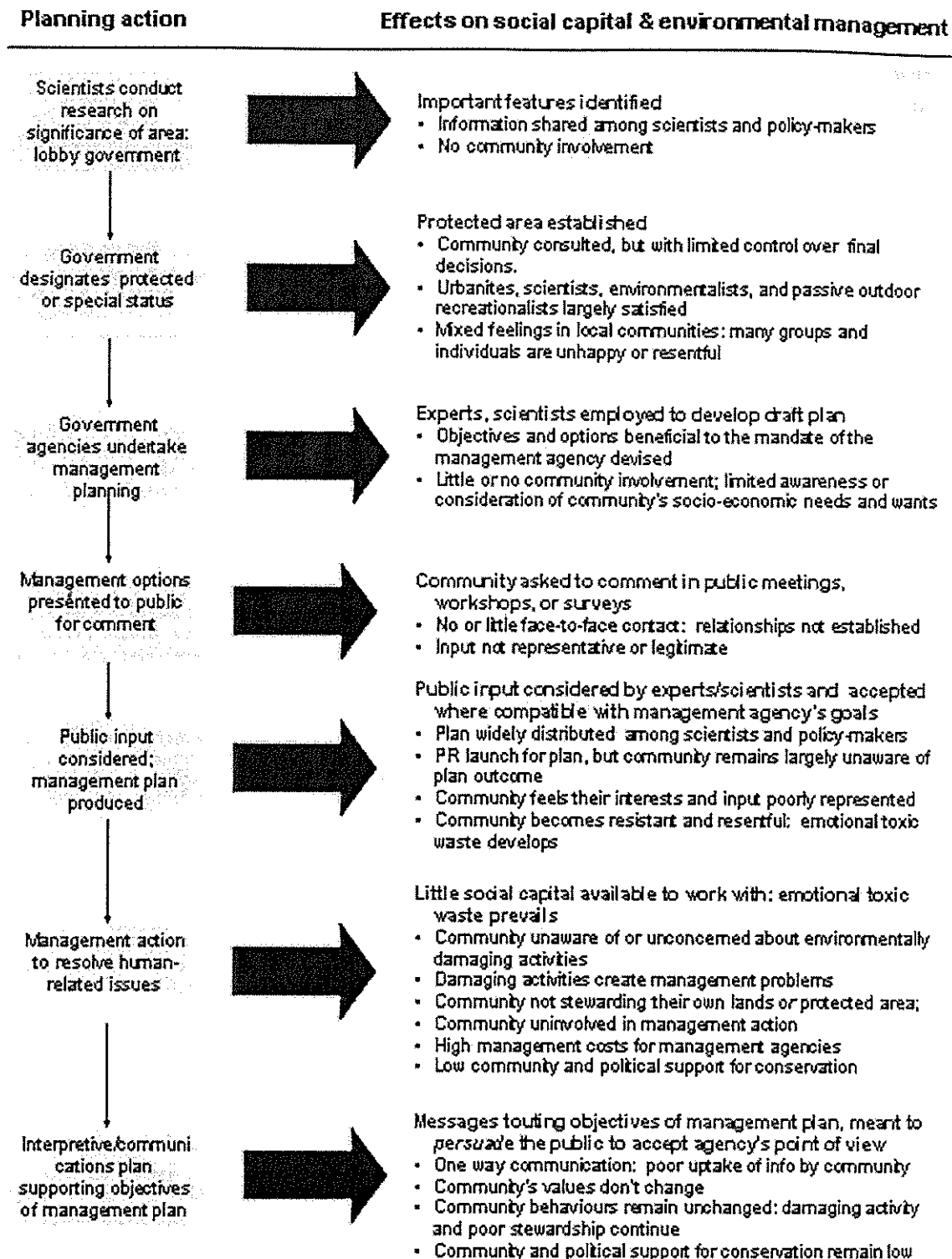


Figure 5.1. The effects of a conventional, non-participatory planning cycle on social capital and environmental management.

COMMUNICATIONS-BASED PLANNING CYCLE

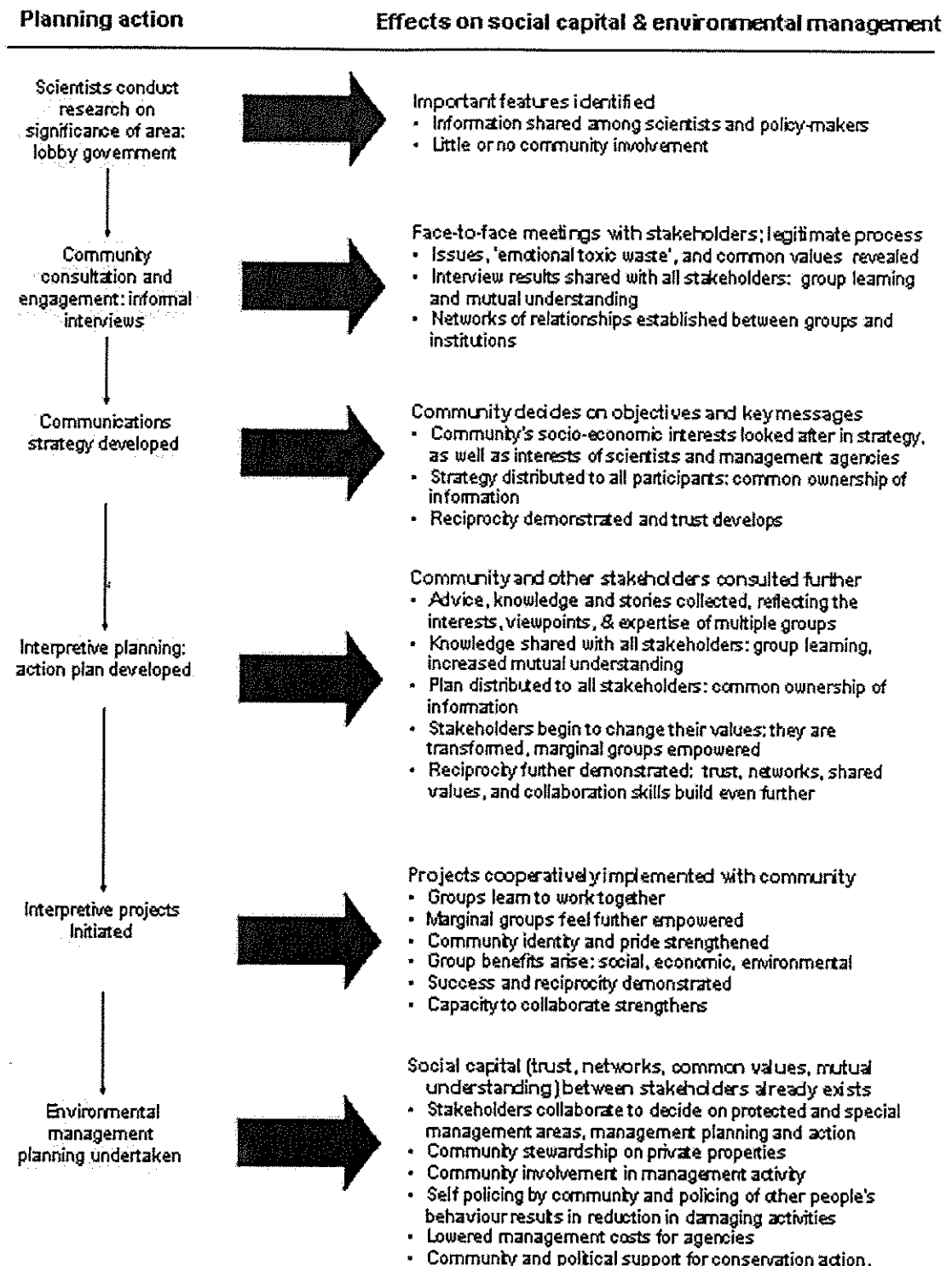


Figure 5.2. The effects of a communications-based planning cycle on social capital and environmental management.

the community in tackling the more difficult and controversial issues associated with protected area establishment, resource use, and restriction of human activities. Deciding on community and stakeholder-based objectives for interpretation and other communications is a comparatively easy exercise, and one which helps generate understanding and common aspirations to serve as the foundation for future decision-making in the community. Once this foundation of social capital is established, it is proposed that cooperation between the community and management agencies will be made easier, and decision-making facilitated.

The key aspects of the communications-based planning model in **Figure 5.2** are continuous participation and demonstrated reciprocity by stakeholders in all steps of the planning cycle. Wondolleck and Yaffee (2000) identify early, frequent and ongoing involvement of stakeholders as key components successful collaboration; they also note that stakeholders should be invited to the table at the outset of any project, and present a number of case studies showing that community outreach is best done before plans are launched, not after. Kay and Alder (1999) also emphasise the importance of consulting the community on all aspects of the planning process. Axelrod's (1984) seminal analysis of "durable iterated Prisoner's Dilemma" simulations identified reciprocity-engaging in activities which are mutually beneficial—as the key to developing cooperative relationships between parties. Reciprocity develops via recurrent events whereby cooperation is tested and confirmed by opponents—thus adequate time frames are required for reciprocity to develop. Therefore, the more frequently people interact, the more likely they are to engage in cooperative behaviour. Axelrod (1984) also suggests that teaching people to care more about each other and practice reciprocity can help produce cooperative behaviour. The nature of such reciprocity in environmental management planning is captured by Christensen *et al.* (1996) who state that "Concerns such as the rights of private property owners and local loss of jobs is unlikely to diminish, and ecosystem management must include strategies that deal positively with those concerns." Reciprocity also focuses on relationships and the bonds of trust that are created between individuals, pointing to the importance of sustaining the presence of planning facilitators and other key decision-makers in the affected community, and the continued involvement of these individuals in plan implementation.

It is crucial, however, that environmental managers do not see participatory planning as a means of persuading other stakeholders to become more like 'us'. Wondolleck and Yaffee (2000) present a number of case studies that indicate that successful outreach programs are not public relations exercises with one-way flows of information, rather they involve two-way flows where citizens learn about the plans of an agency, while the agency learns about the interests and aspirations of the public (Wondolleck & Yaffee 2000). The collaborative process should be seen as a medium through which participants develop mutual respect for diverse perspectives and through which *all* participants change as individuals; in doing so, the community is empowered to develop vision, change itself, and define realistic solutions to its problems (Page & Czuba 1999).

5.5 Conclusion

This project has demonstrated how a participatory approach to communications and interpretive planning, using the tools of equitable engagement, negotiation and participation, can be used as an ethical means to develop multiple narratives for interpretation, and to inform environmental management. In particular, the model

proved to be a useful technique for: surfacing community issues and 'emotional toxic waste', quieting the rhetoric from dominant conflicting parties, identifying common values and community aspirations, garnering knowledge in its socio-political contexts from multiple sources (identifying 'who and what' is important), equalising power relations between community segments, empowering marginalised community members, creating social capital, and generating support and commitment to plan implementation.

The study also demonstrated the vulnerability of participatory processes to cooption and manipulation by powerful stakeholders, and the crucial role of the facilitator in preserving legitimate process and managing these pitfalls to ensure that participation results in positive rather than negative outcomes for all those involved. It also demonstrates that the success of participatory processes relies more on the creation of relationships between stakeholders and facilitators than on the application of formulaic group techniques used to garner public input.

Importantly, the study also suggests an alternative to conventional environmental planning models (where interpretative planning is largely undertaken at the end of the planning cycle) in which communications and interpretive planning are initiated *prior* to other planning steps, in order to build the social capital necessary for effective collaboration between management agencies and the local community in future decision-making related to more contentious issues, such as protected area establishment and access restrictions. This approach is also useful as an intervention to repair or create social capital in areas where relations between the community and management agencies has been damaged by past planning and management activity.

A communications-based approach to environmental planning is consistent with notions of post-normal science, ecosystem health and transdisciplinary sustainability, whereby environmental management targets and sustainability definitions are negotiated with the affected community, such that the community's knowledge, aspirations and socio-economic interests are considered along with environmental concerns and 'expert' advice. As social capital builds through the process of collaboration and negotiation, community members and environmental managers alike begin to change their beliefs and values: this may result in the double-loop learning needed for long-term positive behavioural change, the primary goal of environmental communications and the ultimate prerequisite to resolving environmental issues. This is an area clearly requiring further research.

To quote Allen (2001, p.2.9):

There is now a recognition that constructive change can only happen and be sustained if the people involved are included and empowered to make decisions. People's participation, the integration of the efforts of institutions and improved flows of information are indispensable to the building of real and lasting capacity for sustainable human development.

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